

# MEDICAL TERMINATION OF PREGNANCY (MTP)



Recent update on clinical and legal aspects-





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Dr. Alpesh Gandhi FOGSI President **Dr. Bharti Maheshwari** FOGSI MTP committee chairperson

**FOGSI-FOCUS Medical Termination of Pregnancy (MTP)** 





# FOGSI FOCUS ON

## Medical Termination Of Pregnancy (MTP) Recent Update on Clinical and Legal Aspects

**DEDICATED TO FRONT LINE CORONA WARRIORS** 

## **EDITORS**

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**FOGSI President** 

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### PRESIDENT'S MESSAGE

#### **Dear FOGSIANs**

I wish you season's greetings on behalf of FOGSI.

Reproduction is a woman's fundamental right. When a woman chooses to have a child, should be her explicit choice. As gynaecologists, we wish to offer her this choice in a safe, risk-free manner, so she has control on her own life choices without having to resort to unsafe and dangerous practices.

The process of Medical Termination of Pregnancy is, in this context, a step in the right direction. However, it has been used by many in an unlawful manner to exploit women in vulnerable situations. It therefore became necessary to strictly regulate the practise of MTP.

It is said that during the last year incidence of unwanted pregnancy and unsafe abortion increases significantly because of COVID-19 lockdown. Recently parliament has also made an amendment in MTP act and increases it's limit up to 24 weeks for certain conditions and with certain regulations.

In this FOGSI Focus, we talk about the methods and clinical aspects of abortions. We also discuss topics like infection prevention, management of complications, difficult cases and procedures to be followed in case of failures. We also cover counselling, which is an important part of the MTP procedures, and is often overlooked. We help navigate the minefield of government laws that each gynaecologist has to follow, as well as discuss safety practices and service provision.

The theme for this year activities of FOGSI is Safety First for Indian women and FOGSIANs. This FOGSI FOCUS will help our members in their practice. It is my hope and expectation that this issue will be an asset to our practising consultants, and will serve as a handy guide for day to day use. I wish safety to all of you and your patients.

Kind regards Dr. Alpesh Gandhi FOGSI President



### **VICE PRESIDENT'S MESSAGE**

If One does not support Legal abortion, in effect, one is supporting illegal abortion"

#### Prof Arulkumaran

Every individual has the right to decide freely and responsibly – without discrimination, coercion and violence – the number, spacing and timing of their children, and to have the information and means to do so, and the right to attain the highest standard of sexual and reproductive health Access to legal, safe and comprehensive abortion care, including post-abortion care, is essential for the attainment of the highest possible level of sexual and reproductive health. Three out of ten of all pregnancies end in induced abortion. Nearly half of all abortions are unsafe, and almost all of these unsafe abortions take place in developing countries.

Access to safe abortion protects women's and girls' health and human rights Abortions are safe when they are carried out by following the rules and regulations framed under the MTP act of 1971

When women with unwanted pregnancies do not have access to safe abortion, they often resort to unsafe abortion. An abortion is unsafe when it is carried out either by a person lacking the necessary skills or in an environment that does not conform to minimal medical standards, or both. Characteristics of an unsafe abortion touch upon inappropriate circumstances before, during or after an abortion.

Unsafe abortion can lead to immediate health risks – including death – as well as long-term complications, affecting women's physical and mental health and well-being throughout her life-course. It also has financial implications for women and communities.

I would like the congratulate Dr Bharti Maheshwari for the amazing work she has done as the chairperson of the MTP Committee of FOGSI. In spite of the corona pandemic she has virtually visited most societies of FOGSI to update our members on the Do's and Dont's of safe abortions.

Dr Atul Gantra FOGSI Vice President



### SECRETARY GENERAL'S MESSAGE

Unsafe abortion is a tragedy. It is not simply a tragedy of circumstances, but one of a woman being deprived of one of her most basic Human rights - the right to control her body and her reproductive

ability.

Unsafe Abortion cuts across age, demography and geography. The issues and the stigma which surrounds abortion lead to a low awareness of these problems which have significant effects on women's lives extending beyond the purely medical problems to their personal and social relationship and lives.

The implications of unsafe abortion are even more resonant when you consider the fact that prevention of unsafe abortion is one the fastest and most scalable ways to reduce maternal mortality. Technology available is now safe, efficacious, and cheap. It is of course not enough to simply provide the services but also provide them with care, quality and dignity. Post Abortion

care

has been shown to be a vital component of CAC.

FOGSIans across the country have gone above and beyond in this pandemic to minimise the impact

of this crisis on SRHR issues and I believe that the country and the world owes a debt of gratitude to

all FOGSIans and Healthcare Providers.

I would like to congratulate the MTP Committee and its chair Dr Dr Bharti Maheshwari in particular

for leading the production of this document. It is a comprehensive and easy to read FOGSI Focus which will be a valuable resource for all those who seek information on this topic. Keep safe, keep healthy.

Warm regards,

**Dr. Jaydeep Tank** Secretary General FOGSI. Chair FIGO committee for Safe Abortion. Deputy Secretary AOFOG.



### **EDITOR'S DESK**

Acc to WHO-Access to legal, safe and comprehensive abortion care, including post-abortion care, is essential to attain the highest possible level of sexual and reproductive health. Three out of ten of all pregnancies end in induced abortion. Nearly half of all abortions are unsafe, and almost all of these unsafe abortions take place in developing countries. Emergency treatment of abortion complications is essential to reduce deaths and injuries from unsafe abortion. Still, it cannot replace the protection of women's health and their human rights afforded by safe, legal induced abortion. In india, abortion has

been legalized since 1971 with timely amendments, but it still has 8% maternal mortality due to unsafe

abortion. Most important reason is unawareness about legality of abortion, MTP related acts. To ensure safe abortion services in practice each obstetrician should be, not only aware of MTP and related acts , maintaining proper documentation but also has to improve clinical skills. This FOGSI FOCUS on MTP is having all important informations related to it and I hope, will be very useful for practitioners. All contributors are expert and experienced in their field and given very relevant informations in each chapter.

I am greatful to all FOGSI MTP committee advisors, members, and FOGSI leaders to make my journey of 3 yrs as MTP committee chairperson fruitful and supported lot to disseminate knowledge among members.

I am specially thankful to current FOGSI president Dr Alpesh Gandhi, vice president dr Atul gantra, secretary dr jaideep tank and all esteemed contributors for bringing this FOGSI focus in shape . Words are not enough to express gratitude for my mentor prof padmashri usha sharma and other teachers dr Rukma idnani, dr chandravati, dr Meera agnihotri, dr Kirti dubey, dr Abhilasha guptafor their guidance and encouragement.

In the last, lots of adversity due to corona pandemic in yr 2021, one step towards safety and wellbeing of the women, is approval of MTP act amendment 2021 which will increase the ambit and access of women to safe abortion services and will ensure dignity, autonomy, confidentiality and justice for women who need to terminate pregnancy

Let's make efforts together for saving women's life from abortion-related causes.

Thanks,

Prof. Bharti Maheshwari

FOGSI MTP COMMITTEE CHAIRPERSON-2018-2020

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## Abortion Scenario in India -An Overview

### **DR. NOZER SHERIAR**

**DR. ZUBIN SHERIAR** 

It is estimated that of the 48.1 million pregnancies in India each year, nearly half of were unintended and abortions accounted for a third.The history of induced abortions in India is one of successes and achievements, difficulties and lost

opportunities. While India was one of the first countries to legislate a law to ensure safe abortion for women four decades ago, unsafe abortions still account for significant maternal morbidity and mortality, with unsafe abortion still

remaining the third leading cause of maternal mortality.

#### **Incidence and Prevalence of Induced Abortion**

Earlier studies of abortion prevalence in India from the Abortion Assessment Project estimated that 6.7 million induced abortions took place in India each year. Then in 2015 the Guttmacher Institute which has acknowledged expertise in undertaking global, regional and national abortion prevalence studies, conducted the first truly scientific national abortion incidence study in collaboration with the IIPS and Population Council. In the study published in the Lancet in 2018, it was estimated that 15.6 million abortions were performed each year with the abortion rate 47/1000 women aged 15-49 years. The study had three components; abortions in facilities, medication abortions outside facilities and abortions outside of facilities and with methods other than medication abortion. Facility based abortions were estimated from a survey of 4001 public and private health facilities in six Indian states, Assam, Bihar, Gujarat, Madhya Pradesh,

Tamil Nadu and Uttar Pradesh and from NGO clinic data. National medication abortion drug sales and distribution data were obtained from IMS Health and six principal NGOs (Singh et al, 2018).

The studydocumented a dramatic shift of induced abortions out of health facilities and to medication abortion. Of these only  $3 \cdot 4$  million abortions (22%) were obtained in health facilities while  $11 \cdot 5$  million (73%) abortions were medication abortions done outside of health facilities. Overall 12.7 million (81%) abortions were medication abortions, 2.2 million (14%) abortions were surgical and an unfortunate 0.8 million (5%) abortions were done through other methods that were probably unsafe.

#### **Current legal situation of Induced Abortion**

Even today voluntarily causing miscarriage to a woman with child, other than in good faith for the purpose of saving her life is a crime under Section 312 of the Indian Penal Code, punishable by simple or rigorous imprisonment and/or fine. Consequent sections IPC Sections 313-316 relating to causing miscarriage without a pregnant woman's consent or causing maternal death due to the procedure, are stricter, with punishments ranging from up to 10 years imprisonment and extending up to life imprisonment.

The Medical Termination of Pregnancy (MTP) Act of 1971 provides the legal framework for making comprehensive abortion services available in India. To date the termination of pregnancy was permitted for a broad range of conditions up to 20 weeks of gestation but with the MTP Act Amendments in 2021 the gestation limit has been conditionally extended. The MTP Amendment Act No. 64, 2002 and MTP Amendment Rules, 2003 was the first amendment of the MTPAct and Rules after 1971. FOGSI had an important role in actually formatting the amendments. The salient amendments then were -

• Lunatic wasreplaced by mentally ill person, a person in need of treatmentby reason of a mental disorder other than mental retardation.

• Power of centre recognition was devolved to district level committees constituted with CMO or DHO as the chairperson and consisting of 3 to 5 members.

• Concept of punishment was introduced within the Act with rigorous imprisonment for not less than 2 years extending to 7 years.

• Registration of facilities for first trimester MTP was simplified, segregating these from second trimester abortions.

• Early medication abortions were madefeasible and accessible by permitting prescription by registered medical practitioners at their clinics with just a notional access to an approved centre.

The recent MTP Amendment Act No. 8, 2021 was legislated by Parliament on March 25, 2021. The recommendations for amendment came from a diverse expert group that worked between 2006 and 2010 of which FOGSI was an important constituent. The salient features were -

• Requiring the opinion of a single Registered Medical Practitioner up to 20 weeks.

• Extension of gestational age limit from 20 to 24 weeks for the vulnerable women including minors, unmarried, rape survivors and victims of incest.

• Termination at anytime in pregnancyfor substantial fetal abnormalities with the approval of a Medical Board consisting of a gynecologist, a pediatrician a radiologist or sonologist besides other members.

• Confidentiality for women whose pregnancy has been terminated under this Act except to a person authorised by law. The passage of the amendments was preceded by serious discussion in both the Lok Sabha and the Rajya Sabha. Valid suggestions that were made by Members of Parliament and could provide guidance for the future were -

• Increasing awareness about the legality and availability of safe services.

• Training and permitting nurses, ANMs and AYUSH practitioners to provide early abortions in rural areas with shortage of allopathic practitioners.

• Setting up fast-track courts especially for minor rape survivors.

• Steps to be taken in case the fetus is delivered alive in the course of the MTP.

• Proactively combating stigma associated with abortion.

• Paid maternity leave to women who undergo abortion especially in the later stages.

Even today abortion in India is not considered to b the right of a woman and women continue to face challenges while accessing safe abortion services

According to the MTP Act, abortion needs the opinion and approval of a medical practitioner and a woman cannot get an abortion solely on her request. This is reflective of the general perception that a woman cannot and should not control her reproductive choices. These attitudes extend even to providers, who often ask for spousal or family consent before providing an abortion though it is not a legal requirement and biases such as these also prevent women from accessing safe abortion.

#### **Current Practice, Medication and Techniques**

According to the WHO, when performed in early pregnancy by well-trained practitioners in adequate facilities, abortion has an excellent safety record and early abortions are undoubtedly the safest. The evidence-based guidance of WHO guides the practice of abortion worldwide.In India the clinical practice of safe abortion is guided by the FOGSI Safe Abortion Consensus of 2004, the FOGSI ICOG Good Clinical Practice Recommendations 2010 and the Comprehensive Abortion Care Guidelines of MOHFW GOI,2010 and 2018 which were formulated by a committee that included WHO, ICMR, FOGSI, Ipas and PSS. Early medication abortions.

In the study published in the Lancet, 12.7 million were medication abortions. Of these11.5 million (73%) were obtained outside medical facilities through medication abortion and it is estimated that a large percentage of these were self-managed. Medication abortion has proven its potential for making abortion safer, more accessible and having the potential for widening the provider base.

Mifepristone-misoprostol were approved for use in India in 2002. An early study by FOGSI and Population Council studied a scientifically selected national representative sample of 440 FOGSI members within a year of introduction of medication abortion. Mifepristone was used by 69% of respondents and the commonest dose of mifepristone use was 200 mg in 50% and misoprostol use was 400 g in 73%, with homebased administration in 30%.

This was far better than experiences of other countries and in no small measure due to the work of FOGSI.

The Sample Registration System that provides direct estimates of maternal mortality through a nationally representative sample reported a reduction in maternal mortality caused by unsafe abortion from 12% in 2001 to 8% in 2006. The reason for this significant decrease is most likely due to the widespread availability of medication abortion, withself-managed abortion in a majority of cases.

#### **Early surgical abortions**

In the Lancet study 2.2 million abortions were surgical. The effectiveness of vacuum aspiration for early induced abortion is well established. The FOGSI lpas Multicentric Study was a prospective multicentric study conducted to assess the effectiveness of using the double valve syringe to perform MVA throughout the first trimester. Of the 1686 MVA procedures complete evacuation with MVA was possible in 99.5% of cases below 8 weeks and 98.2% of cases over 8 weeks gestation, with incomplete abortion and other complications reported in 2.9% of cases. The study concluded that MVA is an effective procedure with few complications and can be safely throughout the first trimester of pregnancy.

This was followed up by a pioneering project to introduce MVA in healthcare down to PHC level conducted by FOGSI for the GOI and WHO in 2004. A training program and system was created and MVA training was conducted for over 120 doctors with accompanying nurses from 16 districts from 8 states. The success of the project established the effectiveness, safety and simplicity of the MVA procedure and the feasibility of training doctors in peripheral public service earned it an endorsement as an essential basic procedure. It directly led to the introduction of MVA into the public healthcare system under RCH II.

#### Late abortions

While late abortions have traditionally been induced by numerous methods, they are almost exclusively induced medically by practitioners in India. While the CAC Guidelines describe the use of extraamniotice thac radine lactate, the use of mifepristone misoprostol is now the preferred method in India.

To address the concerns of the mifepristone misoprostol combination not being approved by DCGI, its use is supported by the WHO and CAC Guidelines. Interestingly the national CAC guidelines while stating that mifepristone and misoprostol are presently not an approved method in India, go ahead toacknowledge that evidence from other countries that this is a safe and effective method for termination and then provide the suggested protocol in an annexure giving the method an indirect sanction.

#### Where we are - The way ahead

Considering the 15.6 million abortions undertaken each year in India our greatest challenge is to ensure easy access to safe, legal abortion provided by an adequate system of capable, well trained providers. In response to a Parliament Question on the per capita availability of doctors in India in 2020, it was reported that there are 12.5 lakh allopathy doctors in the country of which 3.71 lakh are specialist doctors. Medical abortion questions and challenges the need for the mandatory fulfillment of conventional often difficult to comply conditions with a role for less qualified providers, delinkage from surgical facilities and provider training that is knowledge based and not surgical skill based.

Going ahead there are practical strategies to support women's access to safe abortion in India.

These include but are not limited to -

"Training and certifying more medical doctors, maybe all general practitioners, to perform early abortions.

• Permitting and training practitioners who are trained in traditional or alternative medicine, midwifery or nursingto be mid-level providers to offer early medication abortion services.

• Streamlining the process for approving privatesector facilities to provide abortion care.

• Ensuring adequate supplies of medication abortion pills and MVA equipment in public-sector facilities.

• Improving the quality of abortion and contraceptive services in the public sector by training providers to offer women confidential and respectful services and in-depth counselling.

• Leveraging the recently accepted modality of telemedicine to provide early medical abortion either in part or entirety

Mahmoud Fathallawrote "Women need power to secure their right to health. Powerlessness of women is a serious health hazard." The right to personal choice and access to safe abortion has been one of the most difficult rights for society to extend to women. In recent times we in India have significant seen legislative and technological change. It is now time for society and our profession toset aside all our reservations and stand up to for women we care for and their reproductive rights particularly safe abortion.

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## 2 MTP ACT AND AMENDMENTS IN INDIA

### DR. JAYDEEP TANK

### DR. BHARTI MAHESHWARI



The Medical Termination of Pregnancy (MTP) Act, enacted in india 1971, governs the provision of abortions in India. This Act allows the termination of a pregnancy up to 20 weeks, for a broad range of indications. It also offers protection to a practitioner if he/she adheres to and fulfils all the requirements of this Act. The MTP Act was amended in December 2002 and the Rules, in June 2003.

#### **MTP act Development Processes**

MTP Act: is passed by both houses of parliament and receives assent by the President.

oSalient Features of the MTPAct:

-Under what conditions can pregnancy be terminated?

-Who can terminate a pregnancy?

-Places where pregnancy can be terminated?

**MTP Rules:** are made by the Central Government and passed by the parliament; notified in the official gazette

#### Salient Features of MTP Rules:

-District Level Committee: composition and site approval process

- Equipment requirement at the sites
- Experience and training required by an RMP

MTP Regulations: are made by the state government and passed by the state legislature

#### Salient features of MTP Regulations:

- Documentation and reporting
- Penalty for violations of the MTPAct
- Comparative objectives of PCPNDTAct and MTPAct

The Medical Termination of Pregnancy (MTP) Act 1971, was amended in 2002

• To facilitate better implementation and increase access for women especially in the private health sector.

• The amendments to the MTP Act in 2002 decentralized the process of approval of a private place to offer abortion services to the district level.

• The District level committee is empowered to approve a private place to offer MTP services in order to increase the number of providers offering CAC services in the legal ambit.

#### **District Level Committee:**

Composition-

Three to five members including the Chairperson.

• Chairperson: Chief Medical Officer or District Health Officer

One member shall be a Gynecologist/Surgeon/ Anesthetist

• Other members should be from the local medical profession, Non-Governmental Organization and Panchayati Raj Institution of the district

• At least one member of the committee should be a woman

• The tenure of the committee will be for two calendar years and the tenure of the NGO member will not be for more than two terms (four years)

#### Is abortion available on demand and a woman's legal right in India?

**Answer:** No. Pregnancy can be terminated in certain conditions only and Indications When Pregnancy can be Terminated-

1. Continuation of pregnancy is a risk to the life of the pregnant woman or can cause grave injury to her physical or mental health

2. Substantial risk that the child, if born, would be seriously handicapped due to physical or mental abnormalities

3. The pregnancy was caused by rape

4. Pregnancy was caused due to failure of contraception in a married couple

Sex selection is not an indication for pregnancy termination under the law.

#### Who can Terminate a Pregnancy-

• Only a Registered Medical Practitioner (RMP) under the MTPAct can terminate pregnancy.

• He/she should possess a recognized medical qualification as defined in the Indian Medical Council Act, 1956

• Have her/his name entered in the state medical register

• Have experience or training in gynaecology and obstetrics as prescribed by the MTP Rules

#### **Experience and Training Requirement-**

1.A practitioner who holds a post-graduate degree or diploma in Obstetrics and Gynaecology
2.A practitioner who has completed six months as House Surgeon in Obstetrics and Gynaecology
3.A practitioner who has at least one year experience in the practice of Obstetrics and Gynaecology at any hospital that has all facilities
4.A practitioner who has assisted a Registered Medical Practitioner (RMP) in 25 cases of medical termination of pregnancy of which at least five have been performed independently in a hospital established or maintained by the government or a training institute approved for this purpose (Such a practitioner can only perform first trimester

#### **Consent for Procedure-**

## Consent for MTP has to taken on fixed format - FORM C

• In case of a woman more than 18 years, married/unmarried, only the consent of the woman is required to terminate pregnancy

• In case of a minor (less than 18 years) or a mentally ill person, consent of a guardian is required

• Guardian means a caretaker willing to be responsible for the woman Spousal consent is not mandatory

#### **Opinion of RMP-**

• For termination of pregnancy up to 12 weeks, the opinion of one RMP is required

• For termination of pregnancy between 13-20 weeks, opinion of two RMPs is required

• Acc to amendment 2021-up to 20 wks-1 RMP opinion and more than 20, opinion of 2 RMP is required

#### Sites for Pregnancy Termination-

1) Hospital established or maintained by the Government

2)Private site approved by the Government or a District Level Committee constituted by the Government for the purpose

#### As per the National CAC Guidelines, pregnancy may be terminated at Government facilities up to:

• Eight weeks of gestation at Primary Health Centre (PHC);

• 12 weeks of gestation at Community Health Centre (CHC) or 24x7 PHC;

• 20 weeks of gestation at District Hospital and above facilities.

The DLC may approve a (private) place to conduct:

Terminations up to 12 weeks; or Terminations up to 20 weeks.

#### MTP Site Approval-

• All private sites need approval before starting abortion services

• Public sector sites do not need separate approval, provided they have the required infrastructure

• Approval of private sites is granted at the district level by the District Level Committee (DLC)

One has to apply for site approval on FORM A and has to submit at CMO office, after inspection and get satisfaction CMO approve site and FORM B is issued to respective site.

## Infrastructure Requirement: First Trimester Site approval-

1.Gynaecology examination/labour table

2. Resuscitation and sterilization equipment

3.Drugs and parenteral fluids for emergency use, notified by Government of India from time to time

4.Back-up facilities for treatment of shock

5. Facilities for transportation

## Infrastructure Requirement: Second Trimester Site-

1. An operation table

2. Instruments for performing abdominal or gynecological surgery

- 3. Anesthetic equipment
- 4. Resuscitation and sterilization equipment
- 5. Drugs and parenteral fluids for emergency use
- 6. Back-up facilities for treatment of shock
- 7. Facilities for transportation

#### Certificate of Approval -Form B-

The certificate of approval for a 'private' place issued by the DLC chaired by the CMO shall be conspicuously displayed such that it is easily visible to visitors.

All Government facilities are by default approved to provide CAC services and therefore do not need a certificate of approval.

## Inspection of the Approved Place - Taking Suitable Action

• The CMO is authorised to inspect the places approved for conducting MTP to verify whether MTP is conducted under safe and hygienic conditions.

• The DLC, in appropriate cases, after affording opportunity to the owner, may suspend or cancel the certificate of approval.

• The owner may file a review application (within 60 days) to the Government against such suspension or cancellation.

• The Government, after giving the owner an opportunity of being heard may confirm, modify or reverse the order.

• DLC members are not authorised to conduct inspections without permission of CMO

#### Medical Methods of Abortion (MMA)

**Provider's eligibility:** Only an RMP, as under the MTPAct, can prescribe MMA drugs

**Site eligibility:** Medical Methods of Abortion up to seven weeks of gestation can be provided by an RMP under the MTP Act, from an OPD clinic with established linkage to an approved site. However, a certificate to this effect by the owner of the approved site has to be displayed at the OPD clinic All the records of pregnancy termination have to be maintained for MMA also (Consent Form, RMP Opinion Form, Admission Register and Monthly Reporting Form)

#### Mandatory Documentation under the MTPActa) Form 'C': Consent Form

**b)** Form I (Opinion Form): RMP shall certify this form within three hours from the termination of pregnancy

• The column for indicating the reason for termination of the pregnancy must never be left blank.

• It must be filled as per the conditions prescribed in the MTPAct as relevant for the pregnant woman

• Sex selection is not a legal ground for terminating a pregnancy.

• The provider/s must ensure that the ground for termination is clearly stated in the opinion form.

• The opinion of the provider is adequate to certify ground/s for providing abortion service.

**c)** Form II: Head of the hospital or owner of the place shall send a monthly statement of cases to the CMO of the district in this form

**d)Form III**: (Admission Register): An approved site shall maintain case records in Form III. This register is kept for a period of five years from the date of last entry

1. The Admission Register is a confidential document and is not open to inspection by any person expect under the authority of law.

2. The same has to be kept in safe custody.

3.No entry of an MTP done shall be made in any case-sheet, operation-theatre register, follow-up card or any document or register other than the Admission Register maintained at the facility.

4. Admission Register needs to be preserved for a period of five years from the date of last entry.

5. There is no requirement for recording sex of the abortus in the Admission Register or any other records.

Category	CLAUSE ( of approved place:	B) OF SECTION 4
A. Pregn	nancy can be terminated upto 12 weeks nancy can be terminated upto 20 weeks	
1. N	lame of the place (in capital letters)	
2. A	ddress in full	
4. Si CATEGO (i (i (i (i CATEGO (i (i	<ul> <li>Gynaecological examination/ labour tability</li> <li>Resuscitation equipment.</li> <li>Sterilization equipment.</li> <li>Facilities for treatment of shock, included</li> <li>Facilities for transportation, if required.</li> <li>RY B</li> </ul>	at the place ple. ing emergency drugs. performing abdominal or gynaecological surgery. upply for emergency cases.
Place :		
		Signature of the owner of the place.

#### FORM B

[Refer sub-rule (6) of rule 5]

#### CERTIFICATE OF APPROVAL

The place described below is hereby approved for the purpose of the Medical

Termination of Pregnancy Act, 1971 (34 of 1971).
As read within upto weeks
Name of the Place
Address and other descriptions

Name of the owner	
Name of the owner	

#### Place :

Date:

To the Government of the .....

### Form C

#### [Refer rule 9]

I	daughter/wife of
aged aboutyears	of (here state
the permanent address) at present res	iding at
do hereby give my consent to the terr	nination of my pregnancy at
	(state the name of place where the pregnancy is to be terminated)

Place:

Date:

Signature

#### (To be filled in by guardian where the woman is a mentally ill person or minor)

Ison/ daughter/ wife of	
aged aboutycars ofat	
present residing at (Permanent address)	
do hereby give my consent to the termination of the pregnancy of my ward	
who is a minor/ mentally ill person at	
(Place of termination of my pregnancy)	

Place:

Date:

Signature

#### **RMP OPINION FORM** FORM I

[Refer regulation 3]

·	(Name and qualifications of the Registered Medical Practitioner in block letters)
	(Name and quantications of the Registered Medical Practitioner in block feiters)
	(Full address of the Registered Medical Practitioner)
ſ	
	(Name and qualifications of the Registered Medical Practitioner in block letters)
	(Full address of the Registered Medical Practitioner)
nereby certify the	at *I/We am/are of opinion, formed in good faith, that it is necessary to terminate the
pregnancy of	
	(Full name of pregnant woman in block letters)
resident of	

(Full address of pregnant woman in block letters) for the reasons given below\*\*.

Signature of the Registered Medical Practitioner

Signature of the Registered Medical Practitioners

Place:\_ Date:

\*Strike out whichever is no applicable.

\*\*of the reasons specified items (i) to (v) write the one which is appropriate.

(i) in order to save the life of the pregnant woman,

- in order to prevent grave injury to the physical and mental health of the pregnant woman, (iii) in view of the substantial risk that if the child was born it would suffer from such physical or mental abnormalities as to be seriously handicapped,
- (iv) as the pregnancy is alleged by pregnant woman to have been caused by rape,
  (v) as the pregnancy has occurred as a result of failure of any contraceptive device or methods used by married woman or her husband for the purpose of limiting the number of children.

Note: Account may be taken of the pregnant woman's actual or reasonably foreseeable environment in determining whether the continuance of her pregnancy would involve a grave injury to her physical or mental health.

Place: Date: \_

Signature of the Registered Medical Practitioner/Practitioners

#### FORM II

#### [Refer Regulation 4(5)]

- 1. Name of the State
- 2. Name of the Hospital/approved place
- 3. Duration of pregnancy (give total No. only)
  - (a) Upto 12 weeks
  - (b) Between 12-20 weeks
- 4. Religion of woman:
  - (a) Hindu
  - (b) Muslim
  - (c) Christian
  - (d) Others
  - (e) Total
- 5. Termination with acceptance of contraception.
  - (a) Sterilisation
  - (b) I.U.D.

#### 6. Reasons for termination: (give total number under each sub-head)

- (a) Danger to life of the pregnant woman.
- (b) Grave injury to the physical health of the pregnant woman.
- (c) Grave injury to the mental health of the pregnant woman.
- (d) Pregnancy caused by rape.
- (c) Substantial risk that if the child was born, it would suffer from such physical or mental abnormalities as to be seriously handicapped.
- (f) Failure of any contraceptive device or method.

#### Admission Register

Name	of Facility							_		Month		Year	
S. No.	Date of admission	Name of the patient	Wife/daughter of	Age (in years)	Religion	Address	Duration of pregnancy	Reasons for which pregnancy is terminated	Date of termination of pregnancy	Date of discharge of patient	Result & remarks	Name of Registered Medical Practitioner(s) by whom the opinion is formed	Name of Registered Medical Practitioner(s) by whom pregnancy is terminated
1	2	3	4	5	6	7	8	9	10	11	12	13	14

#### Documentation for Other Types of Abortion-

**Types:** Spontaneous, Inevitable, Incomplete and Missed: None of these come under the purview of the MTPAct.

#### **Documentation:**

1.Form I not required

2.Consent as taken for any other procedure and not on Form C

3.Procedure not recorded in Admission Register (Form III) but in Labour (OT) Procedure

#### Violation of the MTPAct-

The following offences can be punished with rigorous imprisonment for two to seven years:-

1. Any person terminating a pregnancy who is not a registered medical practitioner as under the MTP Act

2. Terminating a pregnancy at a place that is not approved

3.Mandatory documentation of consent, opinion, case recording and monthly reporting is not adhered to

#### Essential Protocols of Safe and Legal Abortion-

1.It is performed by a Registered Medical Practitioner as defined under the MTPAct

2.It is performed at an approved site I), monthly reporting (Form II) etc. are fulfilled

3. The pregnancy is within the gestation limit approved by the law

4. The provider will get the protective cover of this legislation only when he or she fulfils the abovementioned requirements completely under the Act and recorded in Form III

5.Other requirements of the Act such as consent (Form C), opinion of RMP Form I), monthly reporting (Form II) etc. are fulfille

6.The pregnancy is within the gestation limit approved by the law

The provider will get the protective cover of this legislation only when he or she fulfills the above mentioned requirements completely.

#### Useful DOs DON'Ts-NHM guidelines

POSITIONING according to the National Health Mission(NHM)

• National policy is to make abortion safe and widely available as per the law: Abortion is legal for a number of reasons but not for reasons of selecting the sex of the foetus. Even today, eight percent of maternal mortality is due to unsafe abortions.

• Safe abortion should not be jeopardised in preventing sex selection: Estimates indicate that about nine percent of abortions are sex-selective and therefore ninety percent are not.

• Do not discourage service providers from providing safe and legal abortion, through measures such as tracking of abortion outcomes or reviewing data for second-trimester abortions. Quite obviously, half of the legal abortions will involve femalefoetuses and this will be true regardless of the sex ratio of that area or the level of compliance with the law

#### MTP act amendment 2021

The Medical Termination of Pregnancy (Amendment) Bill, 2021 is for expanding access of women to safe and legal abortion services on therapeutic, eugenic, humanitarian or social grounds.

The amendments include a substitution of certain sub-sections, insertion of certain new clauses under some sections in the existing Medical Termination of Pregnancy Act, 1971, with a view to increase the upper gestation limit for termination of pregnancy under certain conditions and to strengthen access to comprehensive abortion care, under strict conditions, without compromising service and quality of safe abortion.

1. (1) This Act may be called the Medical Termination of Pregnancy (Amendment) Act, 2021. (2) It shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint.

2 .In the Medical Termination of Pregnancy Act, 1971 (hereinafter referred to as the principal Act), in section 2,- (i) after clause (a), the following clause shall be inserted, namely:-

'(aa) "Medical Board" means the Medical Board constituted under sub-section (2C) of section 3 of the Act;'; Short title and commencement. Amendment of section 2.34 of 1971. Bill No. 55-C of 2020 5 10 AS PASSED BY LOK SABHA ON 17.03.2020

(ii) after clause (d), the following clause shall be inserted, namely:-

'(e) "termination of pregnancy" means a procedure to terminate a pregnancy by using medical or surgical methods.'.

3. In section 3 of the principal Act, for sub-section(2), the following sub-sections shall be substituted, namely:-

"(2) Subject to the provisions of sub-section (4), a pregnancy may be terminated by a registered medical practitioner,-

(a) where the length of the pregnancy does not exceed twenty weeks, if such medical practitioner is, or

(b) where the length of the pregnancy exceeds twenty weeks but does not exceed twenty-four weeks in case of such category of woman as may be prescribed by rules made under this Act, if not less than two registered medical practitioners are, of the opinion, formed in good faith, that- (i) the continuance of the pregnancy would involve a risk to the life of the pregnant woman or of grave injury to her physical or mental health; or

(ii) there is a substantial risk that if the child were born, it would suffer from any serious physical or mental abnormality.

Explanation 1.-For the purposes of clause (a), where any pregnancy occurs as a result of failure of any device or method used by any woman or her partner for the purpose of limiting the number of children or preventing pregnancy, the anguish caused by such pregnancy may be presumed to constitute a grave injury to the mental health of the pregnant woman. Explanation 2.-For the purposes of clauses (a) and (b), where any pregnancy is alleged by the pregnant woman to have been caused by rape, the anguish caused by the pregnancy shall be presumed to constitute a grave injury to the mental health of the pregnant woman. (2A) The norms for the registered medical practitioner whose opinion is required for termination of pregnancy at different gestational age shall be such as may be prescribed by rules made under this Act.

(2B) The provisions of sub-section (2) relating to the length of the pregnancy shall not apply to the termination of pregnancy by the medical practitioner where such termination is necessitated by the diagnosis of any of the substantial foetal abnormalities diagnosed by a Medical Board.

(2C) Every State Government or Union territory, as the case may be, shall, by notification in the Official Gazette, constitute a Board to be called a Medical Board for the purposes of this Act to exercise such powers and functions as may be prescribed by rules made under this Act.

(2D) The Medical Board shall consist of the following, namely:- (a) a Gynaecologist; (b) a Paediatrician; (c) a Radiologist or Sonologist; and (d) such other number of members as may be notified in the Official Gazette by the State Government or Union territory, as the case may be."

4. After section 5 of the principal Act, the following section shall be inserted, namely:- "5A. (1) No registered medical practitioner shall reveal the name and other particulars of a woman whose pregnancy has been terminated under this Act except to a person authorised by any law for the time being in force.

(2) Whoever contravenes the provisions of subsection (1) shall be punishable with imprisonment which may extend to one year, or with fine, or with both.". 5. In section 6 of the principal Act, in sub-section (2), after clause (a), the following clauses shall be inserted, namely:-

"(aa) the category of woman under clause (b) of sub-section (2) of section 3;

(ab) the norms for the registered medical practitioner whose opinion is required for termination of pregnancy at different gestational age under sub-section (2A) of section 3;

(ac) the powers and functions of the Medical Board under sub-section (2C) of section 3

# **3** Teenage Pregnancy and POCSO Act

"You can tell the condition of the nation by looking at the status of its women"

#### -Jawaharlal Nehru

**Dr. Atul Ganatra** 

**Dr. Freni Shah** 

#### **Introduction :**

Approximately 21 million girls aged 15-19 years get pregnant each year in developing world, of which 12 million give birth.1 However, 10 million are unintended pregnancies. Of the estimated 5.6 million abortions that occur each year among adolescent girls aged 15-19 years, 3.9 million are unsafe, contributing to maternal mortality, morbidity and lasting health problems.1The estimated global adolescent-specific fertility rate has declined by 11.6% over the past 20 years.2The largest number of births occur in Eastern Asia (95,153) and Western Africa (70,423).3

India has one of the highest rates of early marriage in the world. The recent National Family Health Survey (NFHS) estimates that 27 percent of girls in India are married before their 18th birthday due to culture and social norms, accounting to third of all our young women. India has one of the world's highest numbers of teenage mothers (11 percent), as pregnancies occur in the context of marriage and due to poverty and lack of education and employment opportunities. Also, motherhood is valued and marriage or union and childbearing may be the best of the limited options available to these teenagers. The worst affected state is Bihar where 70 percent of women in their early twenties are reportedly married by the age of 18.



Fig.1: Distribution of pregnancies by outcome, India, 20154



Fig.2: State-wise adolescent birth rate 2005-06, India5

#### **Risk:**

Adolescent mothers (ages 10-19 years) face higher risks of eclampsia, puerperal endometritis, and systemic infections than women aged 20 to 24 years, and babies of adolescent mothers face higher risks of low birth weight, preterm delivery and severe neonatal conditions.6Complications during pregnancy and childbirth are the leading cause of death for 15-19-year-old girls globally.

Social consequences for unmarried pregnant adolescents may include stigma, rejection or violence by partners, parents and peers. Girls who become pregnant before the age of 18 years are more likely to experience violence within a marriage or partnership.7The greatest threat of teenage pregnancy is higher rate of pregnancy related complications like anemia, hypertension, hemorrhage and unsafe abortions, malnutrition, sexually transmitted infections (STI), cervical cancers and the psychological issues. It also affects the society and economy.

In Indian culture, adolescents have little access to correct and comprehensive information on family planning and access to contraceptives, whether married or not, though the need is twice that of adults.Adolescents face barriers to accessing contraception including restrictive laws and policies regarding provision of contraceptive based on age or marital status, health worker bias and/or lack of willingness to acknowledge adolescents' sexual health needs, and adolescents' own inability to access contraceptives because of knowledge, transportation, and financial constraints.



#### Teen Pregnancy - A Major Challenge in India!

- > Teenage pregnancy is still a major challenge in India
- > Teen mothers give birth to undernourished and stunted children
- > Occurs as a result of early marriage before attaining the age of 18 years
- > The Government of India is implementing strategies to stop early marriage

**Fig.3: Teen Pregnancy** 

#### **Prevention:**

Prevention of adolescent pregnancy and related mortality and morbidity and prevention of HIV and HIV- related mortality in adolescents and young people were not given sufficient attention during the early part of the Millennium Development Goals era. As the world has transitioned to the Sustainable Development Goals era, adolescents have moved to the center of the global health and development agenda.9WHO works closely with partners within and outside the United Nations system to contribute to the global effort to prevent children becoming wives and mothers. WHO works to strengthen the evidence base for action, and to support the application of the evidence through well-designed and well-executed national and sub national programs. WHO works closely with the UNICEF, UNFPA and UN Women on a global programme to accelerate action to end childmarriage.

Multi-pronged approaches like comprehensive sexual education, change in social norms by involving village and community and religious leaders, life skills education of both girls and boys, access to contraception, setting up of confidential and adolescent friendly clinics are helpful in prevention of teenage pregnancies.

Only 9-12% of sexually active unmarried 15-24year-olds were using a modern method in 2005-2006, compared with 52% of unmarried 25-49year-olds, in India.

India has successfully reduced the proportion of pregnancy between 15-19 years to half (16 percent during NFHS 3 in 2005-06 and 7.9 percent during NFHS 4 in 2015-16).

## Addressing Vulnerabilities Among Young and Unmarried Women:

Young and unmarried women represent a subset of the population in India that is particularly vulnerable with regard to their sexual and reproductive health care needs. There is often limited awareness among young women about health-promoting behaviors and service availability. Most communities and providers offer little support to young women in seeking safe abortion services. These women often experience delays in obtaining services or turn to unsafe providers. Efforts to raise awareness around the needs of young and unmarried women including their need for contraceptive services and to reduce the stigma around sexual activity, unintended pregnancy and abortion should be prioritized.

#### **POCSO ACT: The Protection of Children from Sexual Offences 10**

The POCSO Act was enacted on 14th November 2012 and applicable to whole of India. It is gender neutral, unlike The Indian Penal Court - it recognizes that boys can be victims of sexual violence as well. It defines a child as someone under the age of 18. The Act also increased the scope of reporting sexual crimes against children. It expanded the definition of sexual assault to include non-penetrative sexual assault as well as aggravated penetrative sexual assault. It also included grave punishment for persons in positions of trust of authority like public servants, staff of educational institutions, hospitals, remand home, protection or observation home, police officer, any member of army or security forces. Notably, this law recognises sexual harassment of a child which involves touch, and also that which doesn't such as stalking, making a child expose themselves or exposing themselves to a child, and so on. The POCSO Act also specifically lays down stringent punishment for exposing children to, or using them to create child sexual abuse material (CSAM, also referred to as child pornography) under sections 13, 14, and 15. The law lays down the procedures for reporting sexual crimes against children. Under section 19 of the Act, it is mandatory to report sexual crimes against children, including when there is an apprehension that an offence under the Act has been committed. This child protection law is also unique because it places the burden of proof on the accused, following 'guilty until proven innocent' unlike the IPC.

Another hallmark of the POCSO Act was that it set up procedures to make the criminal justice system child-friendly and prevent re-traumatisation. The act incorporated child-friendly mechanisms for recording, reporting of evidence, investigation and speedy trial of offences through appointment of Special Public Prosecutors and designated Special Courts.

## Under provisions of the POCSO Act, a child is entitled to the following:

➤ Getting their statement recorded at their residence or a place of their choice, and preferably by a woman police official or an official not below the sub-inspector rank, in civilian clothes.

> The police official should ensure that during the investigation, the child shouldn't come in contact with the accused.

> The child cannot be detained at the police station at night, and his/her identity should be protected from the public and media unless directed otherwise by a Special Court.

> If the survivor is a girl, the medical examination should be done by a woman doctor, and the examination can only be done in the presence of a parent, or a person the child trusts. If neither of the two are there, then the examination should be done in the presence of a woman nominated by the head of the medical institution.

There are also provisions if the case requires support from NGOs or social workers as well as experts (psychologists, interpreters and so on) in the pre-trial and trial stages for the child.



Under section 19.1 of the POCSO Act any person who has apprehension that an offense is likely to be committed or has knowledge that it has been committed, should bring the incident to the notice of the Special Juvenile Police Unit (SJPU) or the local police. Or call on Childline 1098, child welfare committee and local police has be connected.

The POCSO Act requires anyone who knows that a sexual offence has been committed to report the case to the appropriate authorities or to the relevant person in the organization who could report the pregnancy to the appropriate authorities, failing which the person can be punished with up to six months prison and a fine.

The MTP Act guarantees protection for providers who act in good faith. This recognizes that above all else, it is imperative that girls and women receive the highest standard of medical care available. The providers should fulfil their reporting requirements and legal obligations under the MTP Act and the POCSO Act after ensuring essential services.

However, the provider does not need to wait till the authorities take action and may proceed with the termination of pregnancy in line with the provision of the MTP Act after maintaining complete and detailed records of the case.

The provider is not obliged to file a FIR or to conduct an investigation. The provider's duty is only to inform the authorities when providing safe abortion service under the MTPAct.

#### "If one does not support Legal abortion, in effect, one is supporting illegal abortion" -Prof Arulkumaran.

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# 4 MTP and PCPNDT ACT Conflicts

Dr. M.C. Patel

As such there is no **conflict** between the **PCPNDT**Act and the **MTP**Act.

Notwithstanding, the more important unresolved issue is the confusion that seems to prevail in government and civil society about intention of the **Pre-Conception and Pre-Natal Diagnostic Techniques (PCPNDT) Act, and the Medical Termination Of Pregnancy MTP Act,** 1971, and which is being exploited by many "pro-life" organisations of all religious hues to rouse public support against the legal entitlement of abortion.

The MTP Act allows abortion under grounds provided in act, while the PCPNDT prohibits pre-natal sex determination to stop selective female foeticide.

By conflating the two, confusion is being created in the minds of the public against a basic right of women.

- Basic objectives of MTP act 1971 was to liberalize provisions of termination of pregnancy
- To protect the Registered Medical Practitioner who perform abortion as per the provisions under this Act

• To keep the record of a woman under -MTP secret

So, aim of MTP act is to provide safe and secret abortion services under prescribed indications decided by registered medical practioner to avoid criminal abortions in untrained, unauthorised hand. It should be provided in government hospital or government approved hospital. It was enacted to provide umbrella to registered medical practioner who is providing abortion services. Because before MTP act all the cases related to abortion were decided under Indian Penal Code sect.312 to 316 irrespective of pregnancy terminated with consent or without consent.

Before MTP act 1971, Abortion was absolutely prohibited and no consideration for any circumstances whatsoeverrequired /compelled the woman to procure the abortion.

Abortion or Induced Miscarriageunder the purview of the IPC sections 312-316.

Both were guilty:

- Person performing the abortion or causing the miscarriage.
- Woman undergoing abortion

• When using child sex ratio, be aware that this ratio also includes post birth factors that might skew the ratio, such as underreporting, infanticide, selective neglect and resultant female mortality. This underscores the need to also work on some of these post birth contributors to an imbalance in child sex ratio.

• Do not discourage service providers from providing safe and legal abortion, through measures such as tracking of abortion out comes or reviewing data for second trimester abortions.

#### Excuses were only two

- Abortion done in good faith
- In order to save the life of woman

## THE APPLICABILITY OF THE MTP ACT VIS-À-VISIPC

"Notwithstanding anything contained in the Indian Penal Code a Registered Medical Practitioner shall not be guilty of any offence under that code or any other law for the time being in force, if any pregnancy is terminated by him in accordance with the provisions of this Act.

It simply means that if pregnancy is terminated in accordance with provisions of MTP act, Sect.312 to 316 of Indian Penal Code will not be applied

PCPNDT act 1994 (regulation and prevention of misuse of technique was enacted to check gender imbalance

In census of 1971,1981 and 1991 sex ratio of male children to female children of 0-6 years was deteriorated at serious rate. It was social issue. In spite of PNDT act 1994 in census of 2001, ratio of male to female children of 0-6 years was further deteriorated. In 1991 ratio of Male to female children of 0-6 years was 1000:945 which was further dropped to 1000:928 in 2001.

It was observation by "Chetna" for children, young people and women that every day about 2000 girls go missing in India. Considering all these, there was public interest litigation in supreme court for strict implementation of PNDT act. So, in 2003 there was amendment in PNDT act and prohibition of pre conceptional sex selection was also included and now it is called PCPNDT act.

Due to strict implementation of PCPNDT act ,genuine termination of pregnancy during 2nd trimester is also seen with suspicion as there are also possibility of sex determination and sex selected abortion during this gestation period. So, really indicated and needy patient has to suffer.

The PC&PNDT Act prohibits use of technology such as ultrasound for the purposes of sex determination and finally, it prohibits asking for or disclosure of sex of the foetus or advertising for such a service. • It is designed for the prohibition of sex determination or sex selection before and/orafter conception.

• Does not restrict access to safe abortion or require monitoring of abortion services.

• At times, it is assumed that most abortions are for sex selection. This perception is untrue and not supported by any study or facts.

#### Positioning

• National policy is to make abortion safe and widely available as per the law: Abortion is legal for a number of reasons but not for reasons of selecting the sex of the foetus. Even today, eight percent of maternal mortality is due to unsafe abortions.

• Safe abortion should not be jeopardised in preventing sex selection: Estimates indicate that about nine percent of abortions are sex selective and therefore ninety percent are not.

• Promote use of data related to sex ratio at birth and emphases it as a more accurate indicator of the extent of sex selection.

• When using child sex ratio, be aware that this ratio also includes post birth factors that might skew the ratio, such as underreporting, infanticide, selective neglect and resultant female mortality. This underscores the need to also work on some of these post birth contributors to an imbalance in child sex ratio.

• Do not discourage service providers from providing safe and legal abortion, through measures such as tracking of abortionoutcomes or reviewing data for second trimester abortions.

• Quite obviously, half of the legal abortions will involve female foetuses and this will be true regardless of the sex ratio of that area or the level of compliance with the law (BY NHM GUIDELINES for Monitoring Authorities) • Do not imply that all women who previously have daughters are opting for an abortion for sex selection. Several studies have shown that education of the woman and unintended pregnancy are variables more closely correlated with opting for abortion as opposed to sex of the previous child. • Do not use population sex ratio (number of females to 1,000 males in total population) to point to the problem of sex selection

	MTPAct	PCPNDT Act
Objective	Create a legal situation to terminate a pregnancy upto 20 weeks, on a number of therapeutic, eugenic, humanitarian or social grounds.	Improve sex ratio Check female foeticide and decline in sex ratio
Underlying Reason	Wish to terminate an unintended or unwanted pregnancy	Son/gender preference in the community, low valuation of girls, increasing dowry demands
Expected Outcome	Reduce unsafe abrtions	Improve sex ratio

#### Let us see salient features of both the acts

So there is no conflicts between MTP act and PCPNDT act. Both the act should be respected in their own merits.

- Make sure that 'all' abortion is not understood as illegal.
- Abortion for reasons of sex selection definitely needs to be prevented, and its illegality should be emphasized (NHM GUIDELINES)



### MANDATORY DOCUMENTATION UNDER THE MTPACT

a. Form 'C': Consent Form

**b.** Form I (Opinion Form): RMP shall certify this form within three hours from the termination of pregnancy

**c. Form II:** Head of the hospital or owner of the place shall send a monthly statement of cases to the CMO of the district in this form

**d. Form III** (Admission Register): An approved site shall maintain case records in Form III. This register is kept for a period of five years from the date of last entry

#### Essential Protocols of Safe and Legal Abortion-

A. It is performed by a Registered Medical Practitioner as defined under the MTPAct

B. It is performed at an approved site under the Act and recorded in Form III

C. Other requirements of the Act such as consent (Form C), opinion of RMP (Form I), monthly reporting (Form II) etc. are fulfilled

D. The pregnancy is within the gestation limit approved by the law

## The provider will get the protective cover of this legislation only when he or she fulfills the above mentioned requirements completely

In case less than 18 yrs seeking termination service provider has to report the case to the appropriate authorities (either the Local Police or Special Juvenile Police) or to the concerned authority in the Hospital responsible for medico-legal cases to report the same under POCSO ACT-(Protection of Children Against Sexual Offences)

### VIOLATION OF MTP act-

The following offences can be punished with rigorous imprisonment for two to seven years:-

- Any person terminating a pregnancy who is not a registered medical practitioner as under the MTP
- Terminating a pregnancy at a place which is not approved
- Mandatory documentation of consent, opinion, case recording and monthly reporting are not adhered to

### Form C

## (See rule 9)

I		daughter/wife of
the permanent address) at	t present residing at	
-		f my pregnancy at
		state the name of place where the pregnancy is to be terminated)

Place: Date:

Signature

#### (To be filled in by guardian where the woman is a mentally ill person or minor)

Ison/ daughter/wi	fe of
aged aboutyears of	
(Permanent address)	
present residing at	
do hereby give my consent to the termination of the pregnancy of my ward	
who is a minor/mentally ill person at	
(place of termination of pregnancy)	

Place: Date:

Signature

#### MTP SITE APPROVAL-

- All private sites need approval before starting abortion services
- Public sector sites do not need separate approval, provided they have the required infrastructur

• Approval of private sites is granted at the district level by the District Level Committee (DLC) Mtp site approval not require renewal

## The Medical Termination of Pregnancy Rules, 2003 FORM A

### [Refer sub-rule (2) of rule 5] FORM OF APPLICATION FOR THE APPROVAL OF A PLACE UNDER CLAUSE (B) OF SECTION 4

Category of approved place:

- A. Pregnancy can be terminated upto 12 weeks
- B. Pregnancy can be terminated upto 20 weeks
  - 1. Name of the place (in capital letters).....
  - 2. Address in full.....

  - 3. Non-Government/ Private/ Nursing Home/ Other Institutions
  - 4. State, if the following facilities are available at the place

#### CATEGORY A

- (i) Gynaecological examination/ labour table.
- (ii) Resuscitation equipment.
- (iii) Sterilization equipment.
- (iv) Facilities for treatment of shock, including emergency drugs.
- (v) Facilities for transportation, if required.

#### CATEGORY B

- (i) An operation table and instruments for performing abdominal or gynaecological surgery.
- (ii) Drugs and parental fluid in sufficient supply for emergency cases.
- (iii) Anaesthetic equipment, resuscitation equipment and stertilization equipment.

Place :....

Date : .....

Signature of the owner of the place.
# 4.16: Form-B: Site Approval Certificate

[Refer sub-rule (6) of rule 5]

### CERTIFICATE OF APPROVAL

The place described below is hereby approved for the purpose of the Medical
Termination of Pregnancy Act, 1971 (34 of 1971).
As read within upto weeks
Name of the Place
Address and other descriptions
*****

Name of the owner .....

Place :

Date:

To the Government of the .....



### RMP OPINION FORM FORM I [See Regulation 3]

I
(Name and qualifications of the Registered Medical Practitioner in block letters)
(Full address of the Registered Medical Practitioner)
I (Name and qualifications of the Registered Medical Practitioner in block letters)
(Full address of the Registered Medical Practitioner)
hereby certify that *I/We am/are of opinion, formed in good faith, that it is necessary to terminate the pregnancy of
(Full name of pregnant woman in block letters)
resident of
(Full address of pregnant woman in block letters) for the reasons given below**.
* I/We hereby give intimation that *I/We terminated the pregnancy of the woman referred to above who bears the Serial No in the Admission Register of the hospital/approved place.
Signature of the Registered Medical Practitioner
Place: Signature of the Registered Medical Practitioners
Date:
*Strike out whichever is not applicable. **of the reasons specified items (i) to (v) write the one which is appropriate.
<ul> <li>(i) in order to save the life of the pregnant woman,</li> <li>(ii) in order to prevent grave injury to the physical and mental health of the pregnant woman,</li> <li>(iii) in view of the substantial risk that if the child was born it would suffer from such physical or mental abnormalities as to be seriously handicapped,</li> <li>(iv) as the pregnancy is alleged by pregnant woman to have been caused by rape,</li> <li>(v) as the pregnancy has occurred as a result of failure of any contraceptive device or methods used by married woman or her husband for the purpose of limiting the number of children.</li> </ul>
Note: Account may be taken of the pregnant woman's actual or reasonably foreseeable environment in determining whether the continuance of her pregnancy would involve a grave injury to her physical or mental health.

Place:

Date:

Signature of the Registered Medical Practitioner/Practitioners

#### FORM II [See Regulation 4 (5)]

- 1. Name of the State
- 2. Name of the Hospital/approved place
- 3. Duration of pregnancy (give total No. only)
  - (a) Up to 12 weeks
  - (b) Between 12-20 weeks
- 4. Religion of woman
  - (a) Hindu
  - (b) Muslim
  - (c) Christian
  - (d) Others
  - (e) Total
- 5. Termination with acceptance of contraception
  - (a) Sterilisation.
  - (b) I.U.D.
- Reasons for termination : (give total number under each sub-head)
  - (a) Danger to life of the pregnant woman.
  - (b) Grave injury to the physical health of the pregnant woman.
  - (c) Grave injury to the mental health of the pregnant woman.
  - (d) Pregnancy caused by rape.
  - (e) Substantial risk that if the child was born, it would suffer from such physical or mental abnormalities as to be seriously handicapped.
  - (f) Failure of any contraceptive device or method.

Signature of the Officer In-charge with Date

# Form III: Admission Register

Name	Name of Facility MonthYear									Month		Year	
S. No.	Date of admission	Name of the patient	Wife/daughter of	Age (in years)	Religion	Address	Duration of pregnancy	Reasons for which pregnancy is terminated	Date of termination of pregnancy	Date of discharge of patient	Result & remarks	Name of Registered Medical Practitioner(s) by whom the opinion is formed	Name of Registered Medical Practitioner(s) by whom pregnancy is terminated
1	2	3	4	5	6	7	8	9	10	11	12	13	14

### **CHECKLIST FOR MEDICAL METHOD OF ABORTION:**

Detailed history     Detailed history     L     Note any history of     bleeding/pain or any	<ol> <li>Note relevant history</li> <li>Carry out pelvic</li> </ol>
<ol> <li>Counselling including general and method specific counselling</li> <li>Physical and pelvic examination</li> <li>Contraceptive options</li> <li>Investigations (Injection Anti D 50 mcg if Rh negative)</li> <li>Informed consent</li> <li>Mifepristone 200 mg orally</li> <li>Give contact address and phone number of the facility where woman cango in case of an emergency</li> <li>Complete the follow-up card</li> <li>She must keep filling the card</li> </ol>	within six weeks

### FOLLOW UP CARD SHOULD BE USED IN EACH **PATIENT GIVEN MEDICAL METHOD**

# Follow-up Card

M.M.ACARD	If you experience any of the following symptoms, immediately contact a doctor at the health centre:	Excessive bleeding -	Soaking 2 or more thick pads per hour for 2 consecutive hours.		No bleeding within 24 hours after taking second drug.		Persistent fever and foul smelling vaginal discharge after taking second drug.	M2 Party A Part of Andreas
Iame of Health Centre:	If you experience a immediately contact							H
Iame of Doctor : Ph. No.:	cess. 15				1			any re.
Day 1 Day 3 Day 15 Date In case of emergency, immediately contact Name of Health Centre: Phone Number:	This chart will help you to assess your health during the 15 days of medical abortion process. Put a ( ✓) against the symptoms that you experience each day during these 15 days: During the process → 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15							Note: Please visit the health centre for your scheduled day 3 and day 15 visit, or in case of any emergency situation. You may take support of an ASHA worker for visiting the health centre.
Expected Symptoms: During medical methods of abortion, you may experience one or more of the following symptoms which are self-limiting:	health during the 15 ou experience each 4 5 6 7							our scheduled day 3 oort of an ASHA wor
More than normal menstrual bleeding	your h that y 2 3			-				e supp
Pain/cramps in the abdomen	ssess otoms							centre ay tak
Fever/chills/ rigors	symp		rual		Bui			ealth i ou ma
Nausea or vomiting	st the	-	Normal menstrual bleeding	ssive	Nausea / vomiting	sdw	lilis /	the h on. Y
Diarrhoea	ill hel again: roces	Spotting	Normel m bieeding	Excessive	sea / 1	Pain / cramps	Fever / chilis / rigors	e visit situati
Headache	the p	Spo	Norr		Naus	Pain	Fever / rigors	lease incy s
Dizziness	This chart will help you to a Put a ( ✓ ) against the sym During the process	et de	-	a P	1	a		Note: Please visit the health emergency situation. You n

### INCOMPLETE, MISSED ABORTION, BLIGHTED OVUM DOES NOT COME UNDER MTP ACT PERVIEW SO NEED TO FILL FORMS

### Documentation/Reporting Requirement for MMA

- 1. Form I Opinion Form
- Form II Monthly Reporting Form (to be sent to the district authorities)
- Form III Admission Register for case records
- Form C Consent Form



#### **DO\*S FOR LEGAL ABORTION-**

- Ÿ Dysplay site approval certificate (form b) at hospital
- Ÿ All private sites has to be approved, only once ,not need renewal
- Ÿ Check site approval for gestational age and perform MTP accordingly
- Ÿ Check age of girl/woman.if less than 18 yrs,follow POCSO act and inform police
- Ÿ Medical method can be given in OPD having displayed affilation with approved centre
- Ÿ Do proper preprocedure counseling
- Ÿ Don't deny for MTP, if women not adopt any contraceptive method
- Ÿ All documentation should be completed and kept at secured place
- Ÿ Consent has to be taken on form C
- Ÿ Spouse consent is not mandatory
- Ÿ Confidentiality of woman has to be maintained
- Ÿ All second trimester abortion should be done where OT and resuscitation facility is there and patient should be admitted

**6** Violation of MTP Act

### **Dr Shyamal Sett**

**Dr Sukanta Misra** 

[ Past Chairperson of MTP Committee of FOGSI (2015 to 2017), President Elect of The Bengal Obstetric and Gynaecological Society]

[ Professor & H.O.D. of Obst & Gynae, Vivekananda Institute of Medical Sciences, Kolkata Past President of The Bengal Obstetric and Gynaecological Society]

The concept of abortion includes several issues beyond the right to life of the foetus/embryo to privacy and right to bodily autonomy of the pregnant woman. Arguments between pro-life activistsand pro-choice advocates have gone as far as resulting in deaths for upholding the right of the unborn child. Logically, irrespective of the foetus possessing the quality of a person, almost all countries accept the foetus having some right to be protected. So, the right to life cannot authenticate any person to take the life of an unborn child, except -- (i) where the child poses a threat to the life of the mother; (ii) the continued lives of the child and the mother are mutually incompatible. These invoke two privileges to the mother - of self-defence and of self-preservation.

Every year, 19 to 20 million unsafe abortions are performed worldwide of which 97% are in developing countries, and about 55% are in Asia (mostly south-central Asia). WHO defines **Unsafe Abortion** as "a procedure for terminating an unintended pregnancy either by individuals without the necessary skills or in an environment that does not conform to minimum medical standards, or both". Abortion situation in India is a growing concern not only because of poor socioeconomic conditions and preference for male child, but also due to lack of awareness and lack of facilities available and accessible at an affordable cost to them who need those most. Therefore, to reduce the incidences of unsafe abortions and unfortunate maternal morbidity abortion and mortality therefrom. was considered allowed under to he legal regulations.

**MTP ACT 1971** -- Shantilal Shah Committee (1964) recommended liberalization of abortion law in 1966. In 1969 MTP Bill was introduced in RajyaSabha and LokSabha, and passed by the Indian Parliament on 10th August 1971. MTP Act 1971 was implemented from 1st April 1972 exceptin J & K (From 01.11.1976) (MTP Rules and Regulations were revised in 1975).

The MTP Act mainly encompasses -- 1) Who can terminate a pregnancy, 2) Where can a pregnancy be terminated, 3) In which conditions a pregnancy can be terminated, and 4) Upper age limit of 20 weeks for termination of pregnancy.

Salient features of MTP Rules 1975 (amended in 2003) -- 1) Formation of District Level Committee -- defining its composition and tenure; and dealing with MTP site approval process, 2) Formulating infrastructure requirements at the MTP sites according to different trimesters, and 3) Experience and training requirements of the RMP. Salient features of MTP Regulations 1975 (amended in 2003) - Importance of mandatory Documentation and Reporting in different Forms.

<u>VIOLATION OF MTP ACT</u> -- The following offences can be punished with rigorous imprisonment for three to seven years : (1) Termination of pregnancy done by any person who is not an RMP as under Clause 2(h) of the IMC Act 1956 and Clause 2(d) of the MTP Act 1971. (2) Terminating a pregnancy at a place not approved under the MTP Act. (3) Terminating a pregnancy without following the provisions of the MTP Act. (4) Mandatory documentation of **Consent, Opinion, Case recordings** and **Monthly reporting** are not done.

#### Penal Provisions-Indian Penal Code

Well before MTP Act 1971 came into force, Indian Penal Code (IPC) already had the provisions for punishments for 'causing miscarriage'-- under **Therapeutic Abortion Act** by IPC 1860 and Code of Criminal Procedure 1898.

**Section 312 of IPC** defines the offence of 'voluntarily causing a woman to miscarry' without any intention of saving her life. In other words, if someone assists or conducts an abortion with the purpose of saving the life of the woman in good faith, he/she would not be considered as an offender. Otherwise, such a convicted person can be imprisoned for upto 3 years, or even upto 7 years with or without fine if the woman is "quick with the child". Even the pregnant woman herself may be liable to be punished under Section 312. However, the pregnant woman can ask for her relief from conviction by : (i) Privilege of self-defence or (ii) Privilege of self-preservation.

Section 313 of IPC dictates that when an abortion is carried out without the consent of the woman and is also not really intended for the purpose of saving her life, the quantum of offence of that person also goes up.

In such cases, punishment may extend to imprisonment for life, or imprisonment of either description for a term that may be upto 10 years or fine.

According to Section 314 of IPC, if during the process of doing an abortion there is accidental death of the pregnant woman, the accused can be punished with imprisonment from 10 years upto life. It is not important whether the accused is aware that the process to carry out the abortion is likely to cause death of the woman. If such a procedure is done without the consent of the woman, the culpability of the accused is going to be high with more stringent punishment.

Section 315 of IPC can punish a person who does an act that causes : (a) death of the child after birth, or (b) birth of a dead child, for any purpose which is not intended to save the life of the pregnant woman. The punishment may be in the form of imprisonment upto 10 years.

Section 316 of IPC deals with the incidences where a person carries out termination of a pregnancy with the intention to cause death of the woman, may not succeed in doing so, but causes death of the unborn child in the womb, he/she would have committed the offence of "causing death of the quick unborn child by an act amounting to culpable homicide".

\*\* However, all legal systems recognize the right of an individual to protect himself/herself from the danger to his/her own life, and for that purpose to use necessary means or force even to the extent of causing death of that person or life creating the danger.

With the implementation of the MTP Act 1971, the punishments have been incorporated within the provisions of the Act

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#### VIOLATIONS UNDER THE MTP ACT AND THE PENALTIES

#### VIOLATIONS

1. Termination of pregnancy by a person, who is not a Registered Medical Practitioner

#### SECTION/RULE OF THE MTP ACT

(Sec. S (2) (Explanation- 2). The possession by RMP of experience or training in Gynaecology and Obstetrics i.e. provisions of See.2, (d) shall not apply (Sec. S (2) (Explanation- 2)

Section 5(3), 5(4)

2. Whoever terminates pregnancy in a place that is 'unapproved' Any person, being 'owner' of a place that is not approved, and doing or allowing the termination of Pregnancy at such place (See. 5(4). The expression "owner" means any person who is the administrative head or otherwise responsible for the working or maintenance of a hospital or place, by whatever name (DM, MS, DP etc.) called. {Sec.5 (4) Explanation-2}

3. If a person willfully contravenes or willfully fails to comply with the requirements of any Section 7(3)

#### PENALTIES

Termination of pregnancy in violation of provisions of the Act 19 is an offence punishable with Rigorous Imprisonment (R.I.) for a term which shall not be less than 2 years but which may extend to 7 years. {Sec.5 (2), (3), (4)}

Note: It is important and worth wise to mention here that it is now a cognizable offence for which a police officer can arrest a doctor for violations without Warrant.

Termination of pregnancy in violation of provisions of the Act 19 is an offence punishable with Rigorous Imprisonment (R.I.) for a term which shall not be less than 2 years but which may extend to 7 years. {Sec.5 (2), (3), (4)}

Note: It is important and worth wise to mention here that it is now a cognizable offence for which a police officer can arrest a doctor for violations without Warrant.

Penalty of One Thousand Rupees.

Rules 5(7)

# 4. Irregularities in registered centre

#### **Display of Certificate --**

It should be conspicuously displayed at the place to be easily visible to persons visiting the Place.

#### 5. Record Keeping

a) Forms of Certifying Opinion
b) Custody of Forms
c) Maintenance of Admission
Register
d) Admission Register not be
open to inspection
e) Entries in registers maintained
in Hospital or approved place

Section 3, 4, 5,6,7,8 of GSR 2544 dated 10th October 1975 and Rule-9.

Note :- All offences under the Act are cognizable, non-bailable and non-compoundable.

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### **Comprehensive Sexuality Education** Dr. Narendra Malhotra **In Preventing Unsafe Abortions**

Dr. Neharika Malhotra

Dr. Aarti Chitkara

#### **INTRODUCTION**

Almost 73.3 million induced (safe & unsafe) abortions occurred each year between 2015 to 2019(1). It is estimated by WHO that 3 out of 10 pregnancies are unintended (30%) and 6 out of these 10 will end up in induced abortion (61% of all unidentified pregnancy) and 1 out of these 3 induced abortions are carried out in unsafe (dangerous) condition(2).

Half of these unsafe abortions were in Asia (South & central) and 4% - 13.2% of all maternal deaths are attributed to unsafe abortions (3).

Women (adolescent) resort to unsafe abortion because of lack of access to safe abortion & lack of comprehensive sexuality education.

#### WHAT IS COMPREHENSIVE SEXUALITY **CARE**?

Comprehensive sexuality education is a curriculum-based process of teaching and learning about the cognitive, emotional, physical and social aspects of sexuality(4).

Comprehensive sexuality education should be medically accurate, evidence-based, and ageappropriate, and should include the benefits of delaying sexual intercourse, while also providing information about normal reproductive development, contraception (including long-acting reversible contraception methods) to prevent unintended pregnancies, as well as barrier protection to prevent sexually transmitted infections(STIs).

Comprehensive sexuality education if given to all adolescents with special emphasis on safe sexual practices & contraception will go a long way in preventing unsafe abortions(Fig-1).



#### **SCOPE OF CSE**

We need comprehensive sexuality education for all adolescents and even adults for various reasons listed below:-

1. CSE goes beyond education about reproduction, risks and disease

2. CSE provides information on all approaches for preventing unwanted pregnancy, STIS and HIV

3. CSE uses a learner-centred approach

4. Schools play a central role in the provision of CSE

5. Non-formal and community-based settings are also important opportunities to provide curriculum-based CSE

6. CSE for safe sexual practice, access to contraception & safe abortions

#### **COMPONENTS OF CSE (5)**

• Emphasis on human rights values of all individuals, including gender equality, gender identity, and sexual diversity, and differences in sexualdevelopment.

• Encourage consideration of implants and intrauterine devices for all appropriate candidates.

• Include information on consent and decision making, intimate partner violence, and healthy relationships.(Fig-2)

• Participatory and culturally sensitive each in gap poachers that are appropriate to the student' sagas well as identification with distinct sub populations, including adolescents with intellectual and physical disabilities, sexual minorities, and variations in sexual development."

• Knowledgeable about and inclusive of state specific consequences of sexual activity during adolescence, including online and social media activity.

• Discussion of the benefits and pitfalls of online information (eg, gross misinformation on sexuality in cyberspace).

• Provide access to adolescent clinics, contraceptive availability & safe abortion services.

• There are 7 essential components to comprehensive sexuality education which will help to reduce unsafe abortion practices (Fig-3)



[Fig-3]

# THE ROLE OF OBSTETRICIAN- GYNAE COLOGIST

1. In addition to counselling and service provision to adolescent patients, obstetrician-gynecologists can serve parents and communities by supporting and assisting sexuality education by developing evidence-based curricula that focus on clear health goals (eg, the prevention of pregnancy and STIs, including HIV) and providing health care that focuses on optimizing sexual and reproductive health and development, including, for example, education about and administration of the human papilloma virus vaccine (6)

2. Because of their knowledge, experience, and awareness of community's unique challenges, obstetrician-gynaecologists can be an important resource for sexuality education programs(7)

3. Additionally, obstetrician-gynaecologists can encourage patients to engage in positive behaviors to achieve their health goals and discourage unhealthy relationships and behaviors that put patients at high risk of pregnancy and STIs

4. Obstetrician-gynaecologist shave the unique opportunity toact" bi-generationally" byas king their patients about their adolescents' reproductive development and sexual education, human papilloma virus vaccination status, and contraceptive needs.

5. When a responsible adult communicates about sexual topics with adolescents, there is evidence of delayed sexual initiation and increased birth control and condom use(8)

#### CONCLUSION

The purpose of introducing comprehensive sexual education is:

1. To recognize that informed sexual decisionmaking (i.e. being knowledgeable and confident in deciding if, when and with whom to become sexually active) is important to their health and well-being(attitudinal); 2. Recognize tha teach person's decision to be sexually active is a personal one, which can change over time and should be respected at all times(attitudinal);

3. Make responsible decisions about their sexual behavior (skill)

4. To have access to safe abortion services & contraceptive availability

#### SUMMARY

A revised edition of UN's International technical guidance on sexuality education (2019) includes new recommendations on abortion. Evidence now shows that CSE reduces unintended pregnancy and unsafe abortions.

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#### INFECTION SCENARIO IN ABORTION CARE

Estimates from 2010 to 2014 showed that around 45% of all abortions were unsafe. Almost all of these unsafe abortions took place in developing countries1

Estimates from 2012 also indicate that in developing countries alone, an estimated 7 million women per year needed hospital carefor complications of unsafe abortion2.

Each year between 4.7% - 13.2% of maternal deaths can be attributed to unsafe abortion.. In developed regions, it is estimated that only 30 women die for every 100 000 unsafe abortions. Whereas the mortality is seven times higher in developing nations and almost 20 times more in sub-Saharan Africa3

#### **COMPLICATIONS OF UNSAFE ABORTION**

Complications can range from non-severe morbidities like chronic pelvic pain and vaginal discharge which affects her QOL, to fatal conditions endangering life :

- 1. Incomplete abortion leading to heavy bleeding
- 2. Infection of upper and lower genital tract
- 3. Uterine perforation or or damage to other organs like intestines.

#### DIAGNOSIS AND EVALUATION

An accurate initial assessment is essential The critical signs and symptoms of complications that require immediate attention include:

1. Excessive bleeding per vagina

2. Severe pelvic infection with excruciating pain

3. Circulatory collapse and shock.

At times, the complications of unsafe abortion are difficult to diagnose. For example, a woman with an ectopic pregnancy may have symptoms similar to those of incomplete abortion.

Laboratory investigations are rarely possible in acute cases, but they are useful in subacute or chronic cases. Blood tests like CBC, CRP, Urine R/E, M/E and C/S and blood culture in few cases are extremely useful to arrive at a rational diagnosis. An endometrial biopsy specimen should be taken to diagnose endometritis..

#### PRINCIPLES OF TREATMENT AND CARE

Prevention and timely replacement of blood loss . Delays can be fatal..

Broad spectrum antibiotics and evacuation of retained POC as fast as possible.

If injury is suspected, early referral to an appropriate level of health care is essential.

#### ANTIBIOTIC PROPHYLAXIS

This is a very important but controversial issue. For medical abortion, treatment-dose antibiotics may lower the risk of serious infection. However, the number-needed-to-treat is high4 Neither Povidone Iodine nor Chlorhexidine have been shown to alter the risk of infection when used as cervicovaginal preparation, although Chlorhexidine reduces the bacterial load in vagina better than Iodine4

Randomized controlled trials support the use of prophylactic antibiotics for surgical abortion in the first trimester5

But no controlled studies have examined the efficacy of antibiotic prophylaxis for induced surgical abortion beyond 15 weeks of gestation. The risk of infection is not altered when an intrauterine device is inserted immediately post-procedure.

The risk of infection of upper genital tract by Chlamydia trachomatis, Neisseria Gonorrhoeae acute cervicitis is significantly reduced with antibiotic prophylaxis. Bacterial vaginosis (BV) also have an increased risk of infection, but there is no evidence of benefit with BV screening and culture separately.5

Antibiotic prophyllaxis in abortion :NICE guidelines(September 2019)6

a) Antibiotic prophylaxis following Medical abortion is controversial.

Antibiotics are to be used only in Medication abortion cases with high risk of infection, or if they screen positive for sexually transmitted infection. and not routinely, because it may increase antibiotic resistance and adherence will also be low.

Drugs used are: : Oral azithromycin , Doxycycline and Oral or rectal metronidazole (single agent or combination). A three-day course is enough.

b) Surgical abortion: Antibiotic prophylaxis is part of current clinical practice for women having a surgical abortion. Cochrane review showed the effectiveness of nitroimidazoles (such as metronidazole), tetracyclines (such as doxycycline) and beta lactams (such as amoxicillin). A 7-day course of doxycycline is currently used in practice, but a 3-day course seems more logical.

#### **PREVENTION: PRIMARY**

Prevention of unsafe abortion is the most effective measure. This can be achieved through comprehensive sexuality education; effective contraception including emergency contraception and provision of safe legal abortion to women seeking abortion in unplanned and unintended pregnancies

Timely provision of emergency treatment of complications . All these are outlined in the Evidence based resources from WHO (2012)7

#### **SECONDARY PREVENTION**

This essentially means prevention and control of septic abortionin a proper set up.

Anticipation, diagnosis and Effective treatment ofEndometritis by a senior and experienced doctor prevents many serious complications. After a rapid initial assessment a detailed history is taken. The abdominal and pelvic examinations merit special attention. Careful evaluation also demands appropriate lab tests to confirm the diagnosis and treatment is directed to removal or correction of offending factor.

The polymicrbial bacteriology of septic abortion derived from the normal flora of the vagina and endocervix, demands broad spectrum antibiotics. In developing countries, tetanus contributes to septic abortion death.26

The initial 3-day course of broad spectrum antibodies in severe cases should be followed up with doxycycline 100 mg orally twice a day for 14 days, with or without metronidazole 500 mg orally twice a day for 14 days.8Quinolone group of antimicrobials are no longer the 1st choice because of quinolone resistant gonococcus in PID 8

#### **TERTIARY PREVENTION**

Tertiary prevention avoids serious consequences of infection, including hysterectomy and death. It also involves prevention of Systemic inflammatory response syndrome (SIRS) or septic shock and adult respiratory distress syndrome (ARDS) .Management of severe sepsis requires early aggressive volume resuscitation, eradication of the infection and supportive care

#### **ERADICATING THE INFECTION**

Emptying the uterus by a proper, careful gentle method is extremely important, and should be undertaken by a senior Gynaecologist under anaesthesia

The role of laparotomy cannot be overemphasized. It can be life saving at times. In other instances, just drainage of collection and /or pus may be extreley relieving for some cases.

Laparotomy will be needed if the patient does not respond to uterine evacuation and adequate medical therapy. Other indications are uterine perforation with suspected bowel injury, pelvic abscess, and clostridial myometritis.9

Supportive care and adjunctive therapy with steroids oxygen and blood transfusion are extremely important

#### **KEYPOINTS:**

"Infection is still an important cause of Maternal mortality and morbidity even today.

"Most of the infections develop in unsafe abortion.

"Antibiotics play a major role in surgical abortion, but in medication abortion their role is controversial.

"Death and serious complications from abortionrelated infection are almost entirely avoidable.

"Primary prevention is always better than secondary or tertiary levels of prevention of infection.

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**DR KALYAN B BARMADE** 

The Comprehensive Abortion Care: Training and Service Delivery Guidelines (2018) emphasise on the importance of informed consent from the women and, therefore, highlight the importance of pre-procedure counselling:

'Counselling is a structured interaction in which a person voluntarily receives emotional support and guidance from a trained person in an environment that is conducive to open sharing of thoughts, feeliangs and perceptions.'

Every woman who seeks CAC services must be offered counselling.

Providers, nursing staff/ paramedical staff and counsellors (where available) may be appropriately trained to offer abortionrelated counselling services.

Counselling is an integral part of comprehensive abortion services and is as important as performing the procedure correctly.

The process of decision-making may be difficult for the woman and she may need help.

Counselling is also important to help her decide whether to use a temporary or permanent method of contraception to avoid another unwanted pregnancy.

Wherever possible, the spouse should also be counselled.

Pre-procedure Counselling:

1. Ensure that privacy (visual and auditory) and confidentiality are maintained during counselling

2. Be non-judgmental while interacting with the woman and be sensitive to her needs

3. Establish rapport with the woman and

gain her confidence, as abortion is a very sensitive issue and she may be reluctant to discuss it.

4. Building rapport is also critical for finding out whether there have been any attempts to terminate the present pregnancy; this is important for predicting likely problems and may affect their management.

5. Make the woman feel comfortable mentally as well as physically. (The former is extremely important as she may have strange feelings about terminating the pregnancy)

6. Identify the reason for the termination of pregnancy by asking relevant questions related to her personal, social, family and medical history and the past use of contraceptive methods

7. Use simple language and allow the woman to clarify her doubts

8. If she has made up her mind for termination of her pregnancy, assess her for the CAC procedure.

If found eligible for MTP, explain to her, in simple language: The range of available options of MTP techniques based on gestation

The MTP technique chosen by her. For instance, if she has opted for medical methods of abortion, then discuss her preference for the place of misoprostol use.

The likely risks associated with the procedure.

The care required after the procedure,

That this will not affect her future fertility, if done under safe conditions,

The immediate risk of pregnancy if no contraceptive method is used, as fertility can return as early as 10 days after the first trimester abortion and within four weeks after a second trimester abortion,

She should wait for at least six months before trying to conceive again,

Need and schedule for a follow-up, Help the woman to sign the consent, Discuss various contraceptive methods (refer Annexure 1: Post-abortion Contraceptive Methods) including their advantages,

Help the woman to choose a contraceptive method and assess whether the method is appropriate (based on history and examination) for her If the chosen method is not appropriate, explain the reason and help her choose another one.

If the method is appropriate, provide the methodspecific information.

Method	Timing After	Abortion	Additional Information			
	First Trimester	Second Trimester				
A. Barrier Method	s					
Condoms	As soon as sexual activity is resumed	As soon as sexual activity is resumed	No hormonal side-effects     Can be used without consulting a health provider     Easily available     Prevention against STIs, including HIV     Enables men to take responsibility of contraception			
B. Intrauterine Co	ntraceptive Device		С.			
Intrauterine Contraceptive Device (IUCD 380 A, IUCD 375)	Inserted immediately or up to 12 days after confirmation of a completed abortion using the surgical method With MMA, inserted around day 15 of the process, provided	Can be inserted immediately or up to 12 days after the procedure is complete and contraindications are ruled out	Highly effective     Provides long term contraception for 5 years (IUCD 375) or 10 years (IUCD 380 A)     Can be provided by trained doctors (MBBS and above), ANMsinurses after first trimester surgical abortions; by trained doctors (out) after MMA; and			

In case the method is not available at the centre, provide information and other assistance for getting the appropriate service elsewhere.

If the woman is not willing to accept a contraceptive method: Do not refuse MTP, as she is likely to go elsewhere, probably to an illegal abortion provider, and suffer complications,

Assure the woman that she will not be refused MTP.

Wait for an opportunity to counsel her after the procedure. If she is still not willing to accept a contraceptive method, call her for follow-up in a week's time and counsel her again. Record the assessment findings, procedure, contraception or refusal to accept contraception and advice given (including referral)

MTP should not be denied irrespective of the woman's decision to refuse concurrent contraception.

#### pre-procedure counselling:

It helps the woman to decide about the termination of pregnancy.

It helps the woman to choose the method of termination.

It ensures that the consent for the procedure is given after receiving complete information

about the procedure and understanding its implications.

It helps the woman to adopt a contraceptive method after the procedure.

It is crucial that privacy is ensured during the pre-procedure counselling.

aIt is necessary to be non-judgmental while interacting with the woman and be sensitive to her needs.

MTP should not be denied irrespective of the woman's decision to refuse concurrent contraception.

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- 2. The MTP regulations
- 3. The Comprehensive Abortion Care: Training and Service Delivery Guidelines (2018)

# **10** Role of Ultrasound in Medical Termination of Pregnancy

Unsafe abortions contribute to eight percent of maternal deaths in India. In absolute numbers, close to 10 women die due to unsafe abortions each day. While abortion has been legal in India since 1971, available research shows that 56% of the 6.4 million abortions that take place in the country are unsafe1.Despite abortion being legal, the high estimated prevalence of unsafe abortion demonstrates a major public health problem in India2. It is unfortunate that women continue to face severe complications which are totally preventable through just ensuring easy access to safe abortion services. The Medical Termination of Pregnancy Act, 1971 (MTP Act) was enacted in India to reduce the mortality and morbidity associated with unsafe abortions. It entitles women access to safe abortion services under certain specific conditions. The MTP Act lays down the criteria for which a pregnancy can be terminated, by whom, where and up to which gestational age. MTP is performed by qualified health providers using surgical methods or medical abortion drugs (mifepristone and misoprostol). Only induced abortions come under the purview of the MTP Act, which therefore does not cover spontaneous, missed, inevitable and incomplete abortions. The MTPAct offers protection to a practitioner if she/he adheres adheres to the provisions of the MTP Act; and Rules and Regulations made under the MTP Act.

It is imperative to understand that it is not mandatory or binding upon the clinician to advise/perform ultrasound before undergoing MTP3.Clinical finding of intrauterine pregnancy is enough to perform MTP-both medical and surgical. There are certain situations though where ultrasound can be useful before, during after MTP. Ultrasound scanning should be provided in a setting and manner sensitive to women's situation. Before ultrasound is undertaken, women must be asked whether they would wish to see the image or not. All ultrasounds must be registered under Pre-Conception and Pre-Natal Diagnostic Techniques (PC&PNDT) (Prohibition of Sex Selection) Act as applicable for all other ultrasounds of pregnant women.

According to the American Institute of Ultrasound in Medicine (AIUM), in collaboration with the American College of Obstetrics and Gynecology and the American College of Radiology, a "limited ultrasound examination" is performed when a specific question requires investigation4.

## A limited ultrasound exam must include the following:

(1) A full scan of the uterus in both the transverse and longitudinal planes to confirm an intrauterine pregnancy;

(2) Evaluation of embryo/fetal number;

(3) measurements to document gestational age;

(4) evaluation of pregnancy landmarks, such as yolk sac or the presence or absence of fetal/embryonic cardiac activity; and

(5) placental location in second trimester

(6) When clinically indicated, evaluation of other pelvic structures (i.e., adnexal structures and the cul de sac) should be performed and documented or an appropriate referral should be made for further evaluation.

(7) When a patient with a prior uterine scar is found to have placenta previa or a low anterior placenta, or when other placental abnormality is suspected, additional sono graphic imaging should be performed on-site or an appropriate referral made5.

# Ultrasound prior to MTP could be beneficial in following scenarios:

1.Documentation of pregnancy when there is a doubt about the presence of a pregnancy. 2.Dating of pregnancy when it is felt that the patient is not sure of her dates or the clinical examination does not correspond to history.

3.Diagnosis of co-existing mass like fibroid, helping determine its size & location.

4. Diagnosis of congenital uterine anomalies.

5.Diagnosis of extrauterine gestation, Vesicular mole & Missed abortion.

Missing an ectopic : There is a major fear amongst many service providers. However a large study done by Gynuity Health Projects, New York6 showed that ectopic pregnancy was diagnosed very infrequently following medical abortion procedures, occurring in only 10 of 44,789 (0.02%) women. This eliminates the need of mandatory ultrasound before all medical abortions. However if the patient does not bleed 6 hrs. to 8 hrs. after the misoprostol dose then a suspicion of ectopic pregnancy must be made & appropriate diagnostic facility should be restored to. Seeking a second opinion and repeating scans before making a diagnosis in cases of miscarriage and ectopic gestation should be embedded in clinical practice to avoid medico-legal hassles.

Torrential or intractable hemorrhage during surgical evacuation could lead to suspicion of cervical pregnancy which can be diagnosed with ultrasound.(Fig 1)

## Ultrasound following medical or surgical MTP could be beneficial in following scenarios.

- 1.Incomplete evacuation
- 2.Failed medical abortion
- 3. Ruling out Gestational Trophoblastic disease

4. Patients after surgical evacuation presenting with symptoms suggestive of perforation.

5.Post MTP suspicion of heterotopic pregnancy or extrauterine gestation.

#### **1.Incomplete Evacuation**

Hyperechogenic shadows inside the uterine cavity with collection of fluid (bleeding) as an hypoechoic area can be seen.(Fig 2)

Cowett et al suggested that the mean endometrial thickness 24 hours after using misoprostol in women with a complete medical abortion may range from 7.6 to 29 mm7.One week after the abortion, the mean thickness was 11.3 mm but ranged from 1.6 to 24.9 mm. A thickness of more than 15 mm as suspicious for incomplete abortion.

However if the thickness is more that 15 mm & the patient is clinically asymptomatic with no P/V bleeding she need not be subjected to vacuum aspiration even if the endometrial thickness is more than 15 mm.

It is normal to visualize clot and debris in the uterus. The final decision to intervene should be made on clinical signs and symptoms, such as ongoing or heavy bleeding, rather than on ultrasound findings.



Fig 1 : Cervical ectopic



Fig 2: Retained products of conception

#### 2.Intact Gestational Sac

Occasionally an intact sac is found on day 14 without cardiac activity. Management in this situation can be expectant, or may involve a repeat dose of misoprostol or aspiration curettage.



Fig 3 :Intact Gestational Sac

#### 3.Failure of medical abortion.

Presence of cardiac activity 2 weeks after the dose of misoprostol indicates failed medical abortion(Fig 4). If patient complains of continuation of amenorrhoea or pregnancy symptoms USG can confirm or rule out continuation of pregnancy



Fig 4: cardiac activity in failed medical abortion.

#### **Conclusion :**

A. It is not mandatory to perform ultrasound before a medical termination of pregnancy.

B. There are certain situations where ultrasound may be helpful before, during and after a surgical abortion.

C. Ultrasound may be performed for dating a pregnancy with irregular cycles, lactation

amenorrhoea, clinical discrepancy or uncertainty in examination and to exclude an ectopic gestation before a medical termination of pregnancy.

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# **11** Clinical Evaluation Before MTP

### Dr. Sadhana Gupta

Dr. Hema Jai Shobhane

It is estimated that 15.6 million abortions take place in India every year. Despite abortion being legal, a significant proportion of these are expected to be unsafe. Unsafe abortion is the third largest cause of maternal mortality leading to death of 10 women each day and thousands more facing morbidities1. There is a need to strengthen women's access to comprehensive abortion care services. Clinical evaluation before MTP is a significant approach for safe abortion.

#### **Clinical evaluation before MTP:**

Best practice in comprehensive abortion care includes, it must be confirmed that the woman is seeking abortion voluntarily, assessment of gestational age, blood tests, any serious chronic medical conditions should be excluded, referred to appropriate centre as soon as possible, and any ongoing genital tract infection is excluded or properly managed.

**Taking the medical history:** The woman should be asked about the first day of her last menstrual period and regularity of cycle. Some women who are pregnant may not report having missed a period (breast feeding, injectable contraception). Some women may experience non-menstrual bleeding in early pregnancy, and this can be a cause of missing or misdating pregnancy. In addition to estimating the duration of pregnancy, clinical history-taking should serve to identify contraindications to medical or surgical abortion methods and to identify risk factors for complications of treatment and referred to appropriate centre without delay2,3.

Physical examination: Basic routine observations (pulse, blood pressure and, in some cases, temperature) are useful baseline measurements. Additionally, health-care providers must confirm pregnancy and estimate its duration by a bimanual pelvic and an abdominal examination. Signs of pregnancy that are detectable during a bimanual pelvic examination as early as possible before 6-8 weeks of gestation include softening of the cervical isthmus and softening and enlargement of the uterus. A pregnant woman's uterus that is smaller than expected could be due to a pregnancy that is less advanced than estimated from the date of the LMP, an ectopic pregnancy, or a missed abortion, a uterus that is larger than expected may indicate a pregnancy that is more advanced than calculated from the date of the LMP, a multiple pregnancy, a full bladder, the presence of uterine fibroids or other pelvic tumours, or a molar pregnancy. A physical examination is generally more accurate and reliable if the woman empties her bladder prior to the examination. During the physical examination, the health-care provider should also assess whether the uterus is anteverted, retroverted or otherwise positioned in a way that might affect assessment of the gestational age or complicate a surgical abortion.

**Determination gestational age :** It is not necessary to determine the exact gestational age but rather to make sure that the gestation falls within the range of eligibility for a particular method of inducing abortion. The date of onset of the last menstrual period, bimanual pelvic examination, abdominal examination and recognition of symptoms of pregnancy are usually adequate after a positive pregnancy test4

**Blood Tests:** laboratory investigations are not necessary for MTP services. Hemoglobin or haematocrit levels to detect anaemia may be useful when initiating treatment in the rare cases of hemorrhage occurring at the time of or following the abortion procedure. Tests for Rhesus (Rh) blood group typing should be provided when feasible, to administer Rh-immunoglobulin when indicated5.

**STI Screening :** It is best practice to undertake a risk assessment for STIs for all women (e.g. HIV, chlamydia, gonorrhoea, syphilis), and then to screen for them if appropriate andavailable6. This should be done without delaying the abortion and offer condoms for STI prevention to all women undergoing abortion.

**Ultrasound Scanning** : Ultrasound is not routinely required for the provision of abortion. Where it is available, a scan can help identify an intrauterine pregnancy and exclude an ectopic one from 6 weeks of gestation7. It may also help determine gestational age and diagnose pathologies or non-viability of a pregnancy.

**Prevention of infective complications**: Routine use of antibiotics at the time of surgical abortion is best practice as it reduces the risk of infection by half after the abortion8. However, abortion should not be delayed if antibiotics are not available. The following regimens are recommended for perisurgical abortion, 200mg doxycycline within 2 hours before the procedure or 500mg azithromycin within 2 hours before the procedure. Following medical abortion, the risk of intrauterine infection is very low and prophylactic antibiotics are therefore not necessary9,10. **Contraception:** Effective methods of contraception should be discussed with women at the initial assessment and a plan agreed, and documented, for contraception after the abortion. Immediately after surgical abortion is an optimal time for insertion of an IUD (and is safe after both first- and second-trimester surgical abortions). Contraceptive implants can be provided at any time once the abortion procedure has started11.

**Rh-isoimmunization:** All MTPs less than 12 weeks require 50 mcg Rh-immunoglobulin and 300 mcg in MTPs more than 12 weeks.In pregnancies up to 9 weeks' (63 days') gestation, however, the theoretical risk of maternal Rhsensitization with medical abortion is very low12. Thus, determination of Rh status and the offer of anti-D prophylaxis are not considered prerequisites for early medical abortion. If Rh-immunoglobulin is available, administration of the immunoglobulin to Rh-negative women having a medical abortion is recommended at the time of the prostaglandin administration. For women using misoprostol at home, Rh-immunoglobulin may be administered at the time mifepristone is taken.

Ectopic Pregnancy: Signs and symptoms that might indicate extrauterine pregnancy include uterine size smaller than expected for the estimated length of pregnancy, cervical motion tenderness, lower abdominal pain particularly one sided, especially if accompanied by vaginal bleeding and spotting, dizziness or fainting, pallor, and, in some women, an adnexal mass13. If ectopic pregnancy is suspected, it is essential to confirm the diagnosis immediately and to initiate treatment or transfer the woman as soon as possible to a facility that has the capacity to confirm diagnosis and provide treatment14. The inspection of aspirated tissue following a surgical abortion procedure can nearly eliminate the risk of an ectopic pregnancy going undetected. Itshould be noted that it is more difficult to diagnose an ectopic pregnancy during and after medical methods of abortion, due to the similarity of symptoms14.

Additionally, neither mifepristone nor misoprostol are treatments for ectopic pregnancy, which, if present, will continue to grow. These may include pelvic ultrasound and serial human chorionic gonadotrophin (hCG) measurements. If these are not possible, or if ectopic pregnancy is diagnosed or strongly suspected, the woman should be transferred to an appropriate referral center for treatment.

As with many other procedures, adherence to best practice standards will ensure that the most effective and safest services are delivered15. Extending the upper gestation limit from 20 to 24 weeks for special categories of women which includes vulnerable women including survivors of rape, victims of incest and other vulnerable women (like differentlyabled women, minors) etc. Upper gestation limit not to apply in cases of substantial foetal abnormalities diagnosed by Medical Board. Thusevery woman is unique and deserves for sincere adherence with the best pre abortion care, and is not only important to develop confidence, satisfaction in family planning services but also helps in reducing the complications and mortalities associated with procedure.

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# **12** Pain Management in Abortion

Dr. Meena Samant

Dr. Divya Suman

Every year nearly 56 million induced abortions are performed globally[1]. Pain is one of the commonest predictable symptoms of the abortion, whether by medical method or any surgical procedure. In medical methods pain is due to the contraction of smooth muscles of uterus. As the gestation age progresses, the duration and intensity of pain increases. In surgical abortions, pain is due to the discomfort of instrumentation, cervical dilatation and uterine contractions.

Adequate pain management plan is considered as elemental in abortion care. The very purpose of pain management is to minimize the discomfort and anxiety of a woman. It improves the woman's experience.

#### **Medical Abortion-**

WHO currently recommends sub-lingual, vaginal and buccal and routes for provision of misoprostol as part of a combined mifepristone and misoprostol regimen for medical abortion through 63 days gestation. The use of non-steroidal antiinflammatory drugs (NSAIDs) is recommended during medical abortion for pain management [2]. The most commonly used NSAID is Ibuprofen. It is given as 400 to 800mg, at the initiation of Misoprostol. It is repeated 6 to 8 hours as needed. Possible gastrointestinal upset can be the side effect. It should not be given in women with peptic ulcer or renal failure.

Studies have demonstrated that prophylactic Ibuprofen with Metoclopramide may increase the efficacy and decreases the side effect of Ibuprofen Prophylactic use of tramadol may be also considered in reducing the pain with early medical abortion as it is a non-traditional opioid and indicated for the use of acute and chronic moderateto-severe pain [4].Paracetamol is not recommended because it has not been shown to provide better pain relief than compared with placebo.

Tramadol is considered as an effective agent to treat labor pain as well as pain associated with medical abortion in the second trimester [5]. It is observed that tramadol rectal suppository prior to surgical abortion required less intraoperative anesthesia and also resulted in lower postoperative pain scores [6] If equipment and monitoring are available, epidural anesthesia or patient controlled analgesia may benefit the woman undergoing second trimester abortion.

#### **Surgical Abortion**

A quiet and comfortable setting with clear explanation of procedure is necessary to allay the fears. Ibuprofen 400-800 mg or naproxen 500mg given 30-60 minutes prior to procedure is recommended [7]. It reduces both the procedural and post procedural pain. Use of hot water bottle and heated pads after the procedure can be comforting. Listening to music has been found to decrease procedural pain. It reduces anxiety levels and catecholamine, as well as provides distraction to pain.

#### **Paracervical Block-**

Local anesthesia is an effective option for surgical abortion. Paracervical block is a relatively easy method and particularly useful in the outpatient or office setting. Pain associated with uterine contraction and cervical stretching is transmitted via visceral afferent nerve fibres which accompany sympathetic fibers sequentially passing through aggregates of nerve fibres and entering the spinal cord at T11-T12. These fibres run adjacent to the cervix, just deep to the lateral fornix.

A lidocaine syringe is prepared using 20mL of 1% lidocaine and a 3cm needle. Cervical antisepticpreparation is done after placing speculum. Two mL of lidocaine is injected into the anterior lip of the cervix at 12 o'clock position and after grasping with tenaculum. Remaining lidocaine in injected in equal amounts at the cervicovaginal junction, at 2, 4, 8 and 10 o'clock. 10mL of 2% may be substituted. A two-point paracervicalblock technique (injecting at 4 and 8 o'clock) may be used. One ml Sodium bicarbonate may be added to the paracervical block to reduce the injection pain of acidic lidocaine.

Maximum dose of lidocaine is 4.5mg/kg or 200 mg total.

Aspirate before injecting to prevent intravascular injection and deeper administration (3cm) provides better pain relief than superficial one.



Lidocaine toxicity-Complaints of a "metallic taste" (Garrulousness) may be an early sign of systematic toxicity. It can be followed by numbness of the tongue, lightheadedness, visual disturbances, tinnitus, muscular twitching and seizures. After that signs of central nervous system depressionas coma, respiratory arrest and cardiovascular depression can be seen. As soon as lidocaine toxicity is identified, its administration is stopped. Oxygenation is done by face mask. 20% intralipid should iv should be given bolus to reverse cardiac and neurological toxicity.Lipid rescue should be used in cases of collapse secondary to local anaesthetic toxicity. The mechanism by which lipids reverse local anesthetic cardiotoxicity may be increasing clearance from cardiac tissue. This extraction of local anesthetics from aqueous plasma or cardiac tissues is termed a 'lipid sink'.Treatment of cardiac arrest with lipid emulsion42,102consists of an intravenous bolus injection of

Intralipid 20%,1.5 ml/kg over 1 min(100 ml for a woman weighing 70 kg). this is followed by an intravenous infusion of Intralipid 20% 15 ml/kg/h (1000 ml/h1 for a woman weighing 70 kg). The bolus injection can be repeated twice at 5-minute intervals if an adequate circulation has not been restored (a further two 100 ml boluses at 5minuteintervals for a woman weighing 70 kg). After another 5 minutes, the infusion rate should be increased to 30 ml/kg/hr if an adequate circulation has not been restored. Cardiovascular system of the person is monitored carefully. Small doses of epinephrine are administered to the patient. Intravenous fluids and vasopressor drugs causing constriction of blood vessels are used to support the patient's health. Seizures are controlled by the use of benzodiazepines.

#### **IV** sedation

Providing intravenous sedation increases the expense, complexity and potential risks of an abortion procedure. It requires a trained provider with equipment for patient monitoring. It is generally not needed.

#### **General Anesthesia**

It is very effective for intra operative pain control. But GA increases the expense, complexity and potential risks associated with abortion and is not recommended for routine procedures (Atrash, Cheek, & Hogue, 1988; Bartlett et al., 2004; MacKay, Schulz, & Grimes, 1985; WHO, 2014).

#### **Choosing The Right Pain Management**

Individual experiences with pain, responses to pain, and responses to analgesics are complex and subjective. It can vary according to ethnicity, socioeconomic status, cultural factors, physiology, previous experience and genetics, besides other things. An individualized and tailored approach should be followed. Non pharmacological methods should be adjunct. VAS (Visual Analogue Score) for analyzing the pain management can be used in clinics.

This pain management tool helps the health care providers to assess pain to individual patient needs.



#### **Conclusions-**

Pain relief should be provided routinely and when requested for both medical and surgical abortions. In most cases, nonsteroidal anti-inflammatory drugs (NSAIDS)), local anesthesia and/or conscious sedation supplemented by verbal reassurance are sufficient. The need for pain management increases with gestational age and narcotic analgesia maybe required. Prophylactic NSAIDs should be given at the time of starting misoprostol for second-trimester medical abortion. This is likely to reduce the need for narcotic analgesia.

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# **13** Medical Method Of Abortion-Drugs, Dose And Protocol

Dr. Kiran Kurkotti

#### **1.Introduction**

There has always been a traditional demand for non surgical methods for induced abortion from a variety of formal and informal sources being met by irrational hormones, indigenous medicines and meaningless decoctions. In a study, 495 women seeking MVA in rural Rajasthan, 32% admitting to have earlier used medical remedies such as tablets (65%), decoctions (33%) and injections (8%) (Iyengar&Iyengar, 2002).1

Following the US FDA approval on October 2001, medical abortion using mifepristone was approved by the Drug Controller of India on February 13, 2002. With this India joined a select group of 28 countries worldwide to approve this option for women's health, choice and autonomy (Drug Controller of India, 2002). 2

## The approval came with certain accepted preconditions

• Medical termination of intrauterine pregnancy through 49 days of pregnancy

• To be sold by retail on the prescription of a gynecologist only.

• To be used only under the supervision of expert (gynecologist) and in a hospital where back-up facilities are available for blood transfusion and MTP

With in the legal framework in India, the term gynecologist may be interpreted as any RMP certified under the MTPAct and Rules

#### **1.1Introducing A New Drug Mifepristone -Pharmacology**

#### **1.2Mechanism of action:**

Progesterone is imperative for sustaining early pregnancy. Withdrawal of progesterone support results in expulsion of the embryo by a PG medicated mechanism. Mifepristore, a derivative of norethindrone, binds to the progesterone receptor with an affinity greater than that of progesterone itself, without activating the receptor, hence acting as an antiprogestin. These drugs are characterized by the substitutions of the 11-Beta and 17 alpha positions of the steroid ring system and bind strongly to both progesterone and glucocorticoid receptors.

## **1.3 Effects on uterus and cervix during early pregnancy:**

• Alters the endometrium by affecting the capillary endothelial cells of the decidua, resulting in separation of the trophoblast from the decidua, resulting in separation of trophoblast from the deciduas , with resultant decrease

in HCG and bleeding. This results in increased PG release.

• Softens the cervix and facilitates expulsion.

#### **1.4 Pharmacokinetics:**

Given orally, mifepristone is rapidly absorbed, reaching peak concentration in 2 hours. Peak serum concentrations of 2-2.5 micro gram /ml occur in women given 100, 400, 600 or 800 miligrams mifepri stone. The half life is approx 24-29 hours, hence the circulating levels persist for 48 hours.

By 11 days after a 600 mg single oral dose, 83% of the drug is accounted for the faeces and 9% by the urine. Serum levels are undetectable after 11 days.

#### **1.5 Drug Interactions:**

On the basis of this drugs metabolism by CYP 3A4, it is possible that ketoconazole, intraconazole, erythromycin and grapefruit juice may inhibit its metabolism and rifampin, dexamethasone, phenytoin etc may induce mifepristone metabolism.

#### 2. Studies on Misoprostol Used alone for medical abortion.

To date eight studies written in English have examined the efficacy of misoprostol alone for inducing early abortion. Reported success rates, sample sizes, and study locations are listed in the table below. These studies have proved that success rate with misoprostol alone is not satisfactory. In all but one study misoprostol was administered vaginally.

Author (year)	Location	Sample size	Route of administration	Gestational age	Success rate
Norman, Thong, and Baird (1991)3	Lothian, Scotland	40	Oral	<56 days	5%
Creinin and Vittingh off (1994)4	San Francisco, US	30	Vaginal	<56 days	47%
Bugalho, Faundes,	Maputo,	Ia 45	Vaginal	5-7 wk	19%
	N 11	Ib 57		8-1 1 wk	25%
Jamisse, Usfa; Maria,	Mozambique.	Iia 87		5-7 wk	37%
and Bique (1996)5		IIb 46		8-11 wk	30% 50%
Koopersmith and	California, US	I 10	Vaginal	<10 wk	50% 100%
Mishell (1996)6	Camorina, 05	II 3	Vagillar	~10 WK	60%
					60%
		III 15			94%
Carbonell, Varela,	Havana, Cuba	IV 5	Vaginal		9470
Curbonen, varena,	Huvunu, Ouou	141	Vuginur		
Velazco, and Fernandez (1997)7				<70 days	
Carbonell,. Varela,	Havana, Cuba	175	Vaginal	< 63 days	92%
Velazco, Fernandez, and Sanchez (1997)8					
Carbonell, Varela,	Havana, Cuba	120	Vaginal	64-84 days.	87%
Velazco, Cabezas,					
Tanda, and Sanchez (1998)9					
Jain, Mishell, Mekstroth, and Lacarra (1998)10	Los Angeles, US	30	Vaginal	<56 days	97%

Table 1.Studies conducted or, the use of rnisopro stone alone for early termination of pregnancy

#### 3. Combination of Mifepristone and Misoprostol

Numerous studies have the efficacy of various regimes of mifepristone and misoprostol or intra vaginal gemprost in the termination of early pregnancy upto 49 days duration, when followed 48 hours later by oral misoprostol or vaginal gemprost.

Reference	Duration of pregnancy (no. of patient)	Mifepristone and prostaglandin doses	Outcome (%)	Adverse effect
Who Task Force Multicenter <sup>11</sup>	<56 days (1182)	200-600mg+ lmggemeprost vaginally	94	Pain requiring medication 26% vomiting 23%, dizziness 19%
Peyron et al.	12<60 days (890)	600mg + 400mg misoprostol PO	96	Pain requiring medication 13- 16%, vomiting 15- 17%, diarrhoea 10-14%
McKinley et al.	13<63 days (220)	200-600mg + 600ug mioprostolpo	94	Pain requiring medication 46%,opiate8%,NSAID38%

Safety and efficacy data from U.S. clinical trails14 and two French trails15 are reported. Success was defined as complete expulsion of the products of conception without need of surgical intervention. The overall success rate and failure shown by reason for failure, for the U.S. and French studies appear in table 2.

Table-2. Outcome Following Treatment with Mifepristone and Misoprostol in the U.S.
and French Trials

		Frials %	French N	
Complete medical abortion	762	92.1	1605	95.5
Timing of expulsion				
Before second visit	52	(6.3)	89	(5.3)
During second visit	365	(44.1)	846	(50.3)
- less than 4 hrs after misoprostol				
After second visit				
- greater than 4 hrs but less than 24 hrs after misoprostol	155	(18.7)	370	(22.0)
- greater than 24 hrs after misoprostol				
	68	(8.2)	145	(8.6)

Time of expulsion unknown	122	(14.8)	155	(9.2)
Surgical intervention	65	7.9	76	(4.5)
Reason for surgery				
Medically necessary interventions during the study period	13	(1.6)	NA	NA
Patient request				
Treatment of bleeding during study	5	(0.6)	NA	NA
Incomplete expulsion at study end	NA	NA	6	(0.3)
Ongoing pregnancy at study end	39	(4.7)	48	(2.9)
	8	(1.0)	22	(1.3)
Total	827	100	1681	100

#### 4.Indication and Usage

Mifepristone is indicated for the medical termination of pregnancy through 49 days' pregnancy in India. The duration of pregnancy may be determined from menstrual history and clinical examination. Ultrasound should be done if the duration of pregnancy is uncertain or if ectopic pregnancy is suspected. IUCD should be removed before treatment.

#### **5.**Contraindications

• Confirmed or suspected ectopic pregnancy /undiagnosed adnexal mass.

- Chronic adrenal failure.
- Concurrent long term steroid therapy.
- History of allergy to other prostaglandins.
- Hemorrhagic disorders or concurrent anticoagulant therapy.
- Inherited porphyrias.

Because it is important to have access to appropriate medical care if an emergency develops, the treatment is contraindicated if a patient does not have an access to medical facilities equipped to provide emergency treatment of incomplete abortions.

#### 6.Role of Imaging Science in Medical Abortions

It is important to stress here that by no means should it be considered that the procedure of an MTP is deficient if an USG is not done.

## 6.1 Pre-Abortion - How an ultrasound may help:

1. Documentation of pregnancy when there is a doubt about the presence of a pregnancy.

2. Dating of pregnancy when it is felt that the patient is not sure of her dates or the clinical examination does not correspond to history.

3. Confirming the diagnosis of multi fetal pregnancy

4. Localization of co-existing IUCD

5. Diagnosis of co- existing mass Ultrasound can confirm co-existing fibroid, its size & location. Though the gestational period & exact size of embryo or fetus is smaller, clinically uterus may be larger.

6. Diagnosis of congenital uterine anomalies7. Diagnosis of abnormal pregnancy Ectopic pregnancy, Vesicular mole & Missed abortion.

#### **6.2 Post-Abortal Ultrasound Incomplete evacuation :**

This is really the major concern for the provider after a medical MTP. An endometrial echo of more than 15 mm should raise a suspicion of incomplete abortion. However in the absence of symptoms, this need not be considered.

One can see hyperechogenic shadows inside the uterine cavity with collection of fluid (bleeding) as anhypoechoic area. However when a medical abortion has been performed this finding should be interpreted with the clinical situation as the backdropa There is some evidence to suggest that an ultrasound done too early can actually increase the rate of surgical procedures required to complete the abortion. There is therefore a learning curve attributed to dealing with the aftermath of the medical abortion. As the provider gains in experience the incidence of surgical intervention reduces.

#### 7.0 Warnings

Vaginal bleeding occurs for an average of 6-14 days. Bleeding was reported to last for 69 days for one patient in the French trail. In some cases excessive bleeding may require treatment by curettage, administration of saline infusions and/or blood transfusion. Since heavy bleeding requiring curettage may occur in about 1% of patients, special care should be taken to avoid giving this form of treatment to patients with severe anemia. Defination of severe bleeding - more than 2 pads per hour continuously for 2 hours.

#### 8.0 Information for patients

• Patients should be fully advised of the treatment procedure and its effects.

• The necessity of completing treatment schedule including of follow-up visit approximately 14 days after taking mifepristone.

• Vaginal bleeding and uterine cramping will probably occur.

• Prolonged or heavy bleeding is no proof of a complete expulsion.

• If the treatment fails there is a risk of fetal malformation.

• Patients in whom medical abortion fails will be managed by surgical evacuation.

• Patients should have a telephone number that she can call in emergency.

#### 9.Dosage and administration (WHO recommendation)16

### Summary chart of recommendations on medical management of abortion

RECOMMENDATIONS	COMBINAT (RECOM	MISOPROSTOL-ONLY (ALTERNATE)	
	MIFEPRISTONE ) 1	-2 DAYS ) MISOPROSTOL	MISOPROSTOL
A. INCOMPLETE ABORTION	None	Use misoprostol-only regimen	600 μց PO <sup>ь</sup> or 400 μց SL <sup>ь</sup>
B. INCOMPLETE ABORTION ≥ 13 WEEKS	None	Use misoprostol-only regimen	400 µg B, PV or SL every 3 hours⁰
2. INTRAUTERINE FETAL DEMISE $\geq 14-28$ WEEKS	200 mg PO once	400 μg PV or SL every 4–6 hours⁵	400 µg SL (preferred) or PV every 4–6 hours <sup>b</sup>
A. INDUCED ABORTION	200 mg PO once	800 µg B, PV or SL⁵	800 µg B, PV or SL <sup>b</sup>
BB. INDUCED ABORTION ≥ 12 WEEKS	200 mg PO once	400 µg B, PV or SL every 3 hours <sup>®</sup>	400 μg B, PV or SL every 3 hours <sup>6</sup>

#### DAY 1

Mifepristone administration

Patient should read medication guide and sign MTP consent form.

Patient take one 200 mg tablet of mifepristone orally.

#### Minimum recommended interval between Mifepristone & misoprostol is 24 hours.

#### Hence, 1 to 2 days later:

Misoprostol administration.

4 tablets of 200 mcg (total 800 mcg) of misoprostol vaginal, sublingual, buccal route.

Antiemetic (domperidone) and/or pain medication (dicyclomine) if necessary.

Emergency contact number given.

#### **DAY14**

Post treatment examination.

Confirm abortion; no further treatment required. If still pregnant, surgical treatment recommended.

#### **10.Drug interactions**

Drugs like ketoconazole, ictraconazole, erythromycin and grape juice may inhibit the metabolism of mifepristone.

Drugs like rifampicim, dexamethasone and certain anticonvulsants (phenytoin, phenobarbitone, carbamazepine) may induce mifepristone metabolism (lowering the serum levels of mifepristone)

#### **11.Nursing mothers**

Misoprostol is converted into misoprostoic acid. This is secreted in breast milk & causes diarrhoesa in infact. Hence it is recommended that nursing mohers should feed the baby just prior to dose of misoprostol & avoid feeding for the next 4 hours.

#### **12.Adverse reactions**

U. S. trails	French Trails
(%)	(%)
96	N. A.
N. A.	83
61	43
31	2
26	18
20	12
9	N. A.
4	N. A.
N. A.	6
	(%) 96 N. A. 61 31 26 20 9 4

. . . . . . . . .

#### 13.PostAbortion Care

13.1Infection Prevention & Control:

The role of prophylactic antibiotics in reducing the incidence of postabortal infection as well as preventing the long term sequelae has been a subject of debate. Routine use of antibiotics is not recommended in medication abortion. However ,if patient has pelvic infection , antibiotics are desirable.

#### 13.2 Follow up Visits:

For medical methods of abortion, women should report after 15 days for confirmation of completeness of abortion. Besides follow-up visits provide an opportunity for providers to have a proper counseling on contraception, hygiene & other medical ailments

#### 14. PostAbortion Contraception

	TIMING OF POST-ABORTION CONTRACEPTION
	IMMEDIATE INITIATION
HORMONAL CONTRACEPTION	Immediately after the first pill of the medical abortion
IUD	With assessment of successful abortion

#### 15.Medical management of Incomplete Abortion:

#### A. Less than 13 weeks



#### B. More than 13 weeks



B: buccai; PV: vaginal; SE: sublingual

## 16.MEDICO-LEGAL ASPECTS OF MEDICAL ABORTION'S

In the year 2002, it was deemed fit to modify the MTP Act due to many new developments in the field. They are now presented to & steered through Parliament under the heading of

MTP (Amendment) Act ,2002 Act No. 64 of 2002 & published in the Gazette of India - Extraordinary, in December 2002.

As far as the Medical Termination of Pregnancy with drugs is concerned, certain Amendments enacted in this Act are relevant. Under this Act Section 5 was modified to first time legalize the use of drugs to terminate the pregnancy. This was in recognition of the prevalent use of RU-486 & prostaglandins for termination of early pregnancy. Under the explanation to Rule 5 of MTP Rules 2003 , first time detailed Guidelines were proclaimed for terminating pregnancy with RU-486.

#### 16.1 These are as follows :

1) The basic qualifications of a doctor for this purpose remain the same, namely:

a) In the case of a medical practitioner ,who was registered in a State Medical Register immediately before commencement of the Act, experience in the practice of gynaecology& obstetrics for a period of not less than three years ;

b) In the case of a medical practitioner ,who is registered in a State Medical Register :-

(I) if he has completed six months of house surgency in gynaecology& obstetrics; or

(ii) unless the following facilities are provided therein ,if he has the experience at any hospital for a period of not less than one year the practice of gynaecology& obstetrics; or

c) if he has assisted a registered medical practitioner in the performance of twenty-five cases of medical termination of pregnancy of which atleast five have been performed independently, in a hospital established or maintained ,or a training institute approved for this purpose by the Government. 1) This training would enable the Registered Medical Practitioner (RMP) to do only 1 st Trimester terminations

(upto 12 weeks of gestation);

d) In case of a medical practitioner who has been registered in a State Medical Register & who holds a post-graduate degree or diploma in gynaecology&obstetrics, the experience or training gained during the course of such degree or diploma.

So it is important to remember that only a doctor who is duly qualified under MTP Act can use these drugs.

2) The medical termination of pregnancy with RU-486 & Misoprostol may be carried upto 7 weeks ie. 49 days of pregnancy. Such prescription for these drugs may be given either at a place registered under the MTP Act or at a clinic of such Recognized Medical Practitioner provided that he has access to a place approved under Section (4) of MTP Act 1971 read with MTP (Amendment) Act,2002 and Rule 5 of MTP Rules.

3) When such a prescription is given by the said Registered Medical Practitioner under the MTPAct at his clinic, then he should display a certificate to show that he has access to an approved place under the MTPAct. The certificate is to be obtained from the owner of such approved place. e.g. a qualified doctor who does not own his/her own nursing home is supposed to display a certificate showing that he/she has access to a place where a surgical abortion can be performed.

4) The consent & opinion forms should be filled as per any other procedures of MTP under this Act. The records including the register should also be maintained according to the MTP Act, wherein the records of the patients to whom prescriptions for these medicines are given should be included
5) It must be understood that all the obligations, liabilities & punishments are equally applicable to the medical termination of pregnancies with drugs, as they would be for any other first trimester MTP.

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# **14** Management of Failed Medical Methods of Termination of Pregnancy

Dr. Aayshi Rathore

#### Abstract

Failed medical termination of pregnancy is defined as the need for surgical aspiration as a result of either ongoing pregnancy or retained products of conception. The incidence of failed abortion is 1-2% in India. It can have emotional, medical as well as legal consequences and not onlya psychological burden on the patient, but also poses a dilemma for the health care provider regarding further management. This chapter focusses on the strategies provided by the various Indian and international societies for its management.

**Keywords:** medical methods of termination, mifepristone, misoprostol, failed abortion, vacuum aspiration. Medical termination of pregnancy saw a paradigm shift with the entry of two crucial drugs in the late 20th century, mifepristone and misoprostol, none of which was originally developed for this purpose. Until then, surgical termination by injection of chemicals like hypertonic saline, urea and dilatation and curettage were primarily used for this purpose.

. This was associated with increased risk of infection, visceral injuries along with anaesthesia related complications. The introduction of medical means of abortion made it more accessible to females thus breaking barriers and let them choose abortion as an alternative. These drugs went on to become the 'moral property of women' henceforth.

Mifepristone is a selective progesterone receptor modulator and acts by blocking the progesterone receptors on the uterus. It also sensitizes the myometrium to the action on prostaglandins. On the other hand misoprostol (prostaglandin E1 analogue) acts by stimulating myometrial contractions to expel the products of conception. Both of these drugs are currently on the WHO list of essential medications.

Plenty of clinical trials have been conducted so far on the route, dose and timing of these drugs to achieve termination of pregnancy. Sequential use of misoprostol 36-48 hrs after mifepristone has been found to be effective in this regard. The success rate of medical termination of pregnancy is reported to be over 95% in most of these trials. Although in 3% of the cases, patients also aborted after mifepristone alone.

Even though medical termination is associated with great many advantages owing to the fact that it simulates the process of a natural miscarriage and reduces the need of surgery and anaesthesia, nevertheless it has its own limitations and complications as below:

1. Incomplete abortion requiring other methods of evacuation (1-2%)

2. Ongoing pregnancy (1-2%)

3. Excessive vaginal bleeding requiring vacuum aspiration (1-2%)

4. Heavy bleeding requiring blood transfusion (0.1-0.2%)

5. Infection

Failed medical abortion is defined as the need for uterine aspiration because of ongoing pregnancy or retained products of conception (ACOG 2020). The risk of failed medical termination increases with advancing gestational age through 70 days and improper drug selection, dose, route and timing. In this chapter, the management of failed medical abortion has been discussed indepth.

# DIAGNOSIS OF FAILED MEDICAL TERMINATION

As per WHO 2018 guidelines on medical termination of pregnancy, success of medical termination of pregnancy is usually ascertained on the basis of history of heavy vaginal bleeding, passage of products of conception and menstrual cramps (significantly more than the normal menstrual cycles) along with bimanual examination. It is noted that history and clinical examination reveal the success of abortion in 96-99% cases and further investigations such as serum hCG and ultrasonography are not mandatory to make diagnosis of incomplete or failed abortion. They are recommended only if there is a clinical suspicion of the same i.e. no-minimal bleeding within 24 hours after taking misoprostol or if the female has signs and symptoms of continued pregnancy or ultrasound shows gestational sac.

On ultrasound evaluation, presence of gestational sac is the most important feature which suggests failure of medical termination (endometrial thickness is not a very good marker for this purpose and it can be increased due to blood clots thus leading to unnecessary vacuum aspirations). If no gestational sac is seen on TVS, vacuum aspiration is required in only 1.6% of such cases.

Despite the fact that serum hCG evaluation (or urine pregnancy test) is not very reliable as it can be increased even after four weeks of successful abortion, it can be beneficial in patients in whom the levels are below the threshold of detection of gestational sac on ultrasound. A fall of at least 80% over 6-7 days after start of medical termination with mifepristone and misoprostol signifies success of termination.

## TREATMENT OF FAILED MEDICAL TERMINATION

Meticulous pre-abortion counselling regarding the drugs, their route and timing along with the associated side effects plays an important role in management. Information should be provided about the risk of failed termination before commencing the treatment and consent for surgical/repeat medical termination has to be taken in advance. In certain cases of failed termination, the female changes her heart and wishes to continue the pregnancy even after taking the drugs for MTP. In such situations, the decision of the patient should be acknowledged and she is counselled regarding the possibility of teratogenicity, informed consent is taken and the pregnancy should be monitored closely.

Even though mifepristone is not particularly notorious to cause teratogenicity, there is limited evidence to suggest that mifepristone might be associated with an increased risk of haemorrhage in pregnancy. Currently, treatment with progesterone during pregnancy doesnot alter the risk of teratogenicity after taking mifepristone. Misoprostol is more commonly associated with limb defects with or without Mobius syndrome (congenital abnormality with features suggestive of sixth and seventh cranial nerve palsy).

According to 2011 FIGO guidelines, combination of mifepristone (200mg) followed by misoprostol (800µg) vaginally/sublingually/buccally upto 9 weeks (63 days) of pregnancy is found to induce abortion in 98% of the cases and failure rate is approximately 0.2-0.5%. It also recommends that in cases of failed termination, 400 µg misoprostol can be repeated as before. For pregnancies between 9-12 weeks (63-84 days) it states that 200mg mifepristone should be followed by 800µg misoprostol vaginally after 36-48 hours at the health centre and then followed by 400µg misoprostol at 3 hourly intervals till complete abortion. At this time the maximum number of doses for misoprostol were defined as five. The success rate of this regimen is stated as 95% and the rate of failure of abortion is 1.5%.

For beyond 12 weeks (>84 days), 200mg mifepristone followed by 800µg misoprostol vaginally and400µg vaginally/sublingually/orally at 3 hourly intervals (maximum 5 doses)at the health centre are recommended. The dose of misoprostol is reduced in cases of a scarred uterus or in case of gestational age 22-24 weeks. It is stated that second dose of misoprostol is required in 3% of the cases on this regimen

Table 1: Recommended Mifepristone and Misoprostol regimen for
induced abortion (FIGO 2011)

Period of gestation	Mifepristone	Misoprostol (after 24-48 hours)	Additional Misoprostol
Upto 9 weeks (63 days)	200mg PO once	800µg PV, B or SL	400µg PV, SL or PO
9-12 weeks (64-84 days)	200mg PO once	800µg PV	400 μg PV or SL 3 hrly (max 5 doses)
>12 weeks (>84 days)	200mg PO once	800µg PV	400 μg PV, PO or SL 3 hrly (max 5 doses)

B: Buccal, PO: oral, PV: vaginal, SL: sublingual

In 2017, FIGO updated its guidelines on the use of misoprostol and excluded the limit on the maximum number of doses that can be given for achieving successful abortion and mentioned that it depends on the clinical symptoms of the patient. In addition to this, it also advocates that misoprostol is to be given depending on the size of the uterus rather than the LMP in cases of incomplete abortion.

# Table 2: Recommended Mifepristone and Misoprostol regimen for<br/>pregnancy termination (FIGO 2017)

Period of gestation	Mifepristone (preferrable)	Misoprostol
<13 weeks	200mg PO once	800µg SL every 3 hours or PV/B every 3-12 hourly (2-3 doses)
13-24 weeks	200mg PO once	400µg PV/SL/B every 3 hours

B: Buccal, PO: oral, PV: vaginal, SL: sublingual

In 2016, Government of India issued guidelines on management of complications of medical methods of termination on the basis of clinical features as well as the presence and viability of gestational sac on ultrasound. It states that if there is continuation of pregnancy (viable gestational sac) then vacuum aspiration should be done and if the pregnancy is non-viable, then repeat dose of misoprostol (400mcg sublingual) is preferred and follow up is advised after 7 days to ensure that the termination is complete. The drug protocol recommended for medical method of abortion is described in Table 3. (Flow chart 1)

#### Table 3: Drug protocol for Medical method of abortion (GOI 2016)

For beyond 12 weeks (>84 days), 200mg mifepristone followed by 800µg misoprostol vaginally and400µg vaginally/sublingually/orally at 3 hourly intervals (maximum 5 doses)at the health centre are recommended. The dose of misoprostol is reduced in cases of a scarred uterus or in case of gestational age 22-24 weeks. It is stated that second dose of misoprostol is required in 3% of the cases on this regimen

Visit	Day	Drugs used
1 <sup>st</sup>	One	<ul><li> 200mg Mifepristone PO</li><li> Anti D</li></ul>
2 <sup>nd</sup>	Three	<ul><li> 400µg Misoprostol SL/B/PV/PO</li><li> Analgesic, antiemetic, contraception</li></ul>
3 <sup>rd</sup>	Fifteen	• Confirm and ensure completion of abortion & offer contraception

B: Buccal, PO: oral, PV: vaginal, SL: sublingual

The World Health Organization (WHO) has recently updated its recommendations (in 2018) on the medical termination of pregnancy. In this updated version it has been advised that in cases of failed MTP, repeat doses of misoprostol can be offered to

the patient to ensure complete abortion. However, in consensus with FIGO 2017 directions, the maximum number of doses have been omitted and this decision has been left to the clinician's discretion and judgement.

Table 4: Medical Management of Induced Abortion (W	VHO 2018)
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Period of gestation	Combination Regimen (Recommended)		Misoprostol Only (Alternate)
	Mifepristone Misoprostol		Misoprostol
>12 weeks	200mg PO once	800µg PV or SL	800µ B, PV or SL
>12 weeks	200mg PO once	400μ B, PV or SL every 3 hours	400μ B, PV or SL every 3 hours

B: Buccal, PO: oral, PV: vaginal, SL: sublingual

#### **TREATMENT OF INCOMPLETE ABORTION**

In 2016 Government of India guidelines update on medical methods of abortion has defined heavy bleeding after abortion as soakage of two or more thick pads per hour for two consecutive hours. In such cases the female should be examined to rule out hypovolemia and to rule out incomplete abortion. Intravenous fluids should be started as early as possible (ringer lactate solution at the rate of 30 drops per minute) along with blood transfusion (if necessary) for initial resuscitation.

If after initial stabilization, if products of conception are felt on bimanual examination, they should be removed digitally or using ovum forceps followed by vacuum aspiration. If they are not felt, further management is guided by the clinical and ultrasound findings. In case a non-viable gestational sac on USG, additional dose of misoprostol (600mcg oral or 400mcg sublingual) is given followed by expectant management till expulsion of products. Conservative management is also recommended if no gestational sac is visible on ultrasoundand the patient is advised to follow up after 1 week. (Flow chart 1)

RCOG 2015 recommendations on comprehensive abortion care guidelines also suggest that incomplete medical abortion can be managed both surgically (by vacuum aspiration/ blunt forceps) or medically(using misoprostol). The dose of misoprostol varied according to uterine size as follows:

- At <14 weeks: misoprostol 600 µg orally or 400 µg sublingual
- At14-28 weeks: misoprostol 200 µg vaginal/sublingual/buccal6 hourly (with or without mifepristone 200mg orally 12-48 hours prior to misoprostol)
- At >28 weeks: 25  $\mu$ g misoprostol vaginally 6 hourly or 25  $\mu$ g 2 hourly orally

Antibiotic prophylaxis with doxycycline 200mg or azithromycin 500 mg within 2 hours of the procedure is recommended at all gestations.

#### CONCLUSION

Although medical termination of pregnancy is effective in >95% cases, the possibility of failed medical abortion should be informed to the patient beforehand along with the possibility of surgical in intervention in such a scenario. Appropriate training of health care personnel regarding the methods of termination of pregnancy, both medical as well as surgical, is crucial for efficient management of associated complications.

#### Flow chart 1: Management of failed and incomplete abortion

(courtesy: Ministry of Health & Family Welfare (MoHFW), Government of India: Handbook on Medical Methods of Abortion to Expand Access to New Technologies for Safe Abortion. January 2016)



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Termination of pregnancy can be done by surgical method in first trimester by vaccum aspiration and in 2nd trimester by dilatation and evacuation .Patient is always counseled for option of methods of termination for her gestational age with detailed information about procedure, risk, complications and follow up. patient select method of termination.

Indication of surgical method of termination-

- a. Patient not prefer medical method in 1st trimester
- b. Termination of pregnancy after 9 wksonwards
- c. Incomplete abortion
- d. Failed medical method

#### METHODS-IN FIRST TRIMESTER-

#### 1)VACCUM ASPIRATION-

Manual Vaccumaspiration(MVA) is Gold standard method according to WHO.It can be done till 12 weeks safely.it can be done in paracervical block or 30 mins before oral analgesics.An accurate clinical assessment, counselling and informed consent is a must before a VA proceduredetails are given in next chapter.it is associated with minimal complications and easy to do.IT Is also very commonly used in failed medical method or incomplete abortion.

#### 2) DILATATION AND EVACUATION

1. The D&E method involves preparing the cervix and evacuating the uterus with a combination of suction and forceps.

2. It is a safe and effective surgical technique for abortions beyond 12-14 weeks where skilled, experienced providers are available.

3. D&E requires preparing and dilating the cervix;

and evacuating the uterus using vacuum aspiration and ovum/sponge-holding forceps

#### PAIN MANAGEMENT -

The types of pain management medications appropriate for D&E procedure are:

1. Non-narcotic analgesics, such as Ibuprofen, can be used to control pain during and after the procedure

2. Anxiolytics, such as Diazepam, reduce anxiety and relax muscles. These are useful when the woman is anxious but is otherwise in a stable physical condition

3. Administer paracervical block

4. I/V sedation may be used with injection of Pentazocine 30mg and Promethazine 25mg l
5. General anaesthesia may be given, if required

#### How to Administer paracervical block-

1. Use Lignocaine one per cent (10ml; never more than 20ml).

2. Give the paracervical block using a 22-24 gauge needle. There is increasing evidence to show that pre-testing before the administration of local anaesthesia need not be mandatory

3. Apply slight traction with the volsellum/Allis forceps to identify the area between the smooth cervical epithelium and the vaginal tissue.

4. Insert the needle just under the epithelium to a depth of 1.5-2cm at 4 and 8 o'clock positions and inject 2-4ml of Lignocaine at each site Paracervical Block

5. Proceed with MVA after allowing 2-4 minutes for the local anaesthesia to be effective .

6. It is vital to aspirate before injecting the Lignocaine to ensure that the needle is not in the blood vessel

D&E is a two-step process:

(i) Cervical preparation/dilatation (ii) Evacuation

(i) **Cervical preparation/dilatation:** It is recommended for all women undergoing the termination of pregnancy over 12-14 weeks.

• It decreases the risk of cervical injury and uterine perforation.

• medication/devices/instruments are used for cervical preparation and dilatation before the evacuation of the POCs:

Misoprostol1 Osmotic dilators

#### Misoprostol for cervical preparation:

• Misoprostol (400mcg) is used vaginally 3-4 hours or sublingually 2-3 hours before the procedure for cervical dilatation.

• One additional dose of 400mcg may be given if the dilatation is inadequate after four hours or dilators may be used.

#### Advantages of using misoprostol for dilatation:

1. It is a highly effective drug for inducing cervical dilatation and uterine contractions

2. The administration of misoprostol leads to the contraction of the uterus even before the actual procedure is initiated, thereby reducing the amount of blood loss, possibility of perforation and the time taken for the procedure

## Disadvantages of using misoprostol for dilatation:

• It has GI side-effects, which can discomfort the woman

Evacuation should be done after achieving the desired level of cervical dilatation -

• proceed with the evacuation of uterine contents with 12-16mm cannula and forceps.

In the unlikely event that the foetus parts cannot be easily removed, administer additionally any one of the following uterotonic agents such as:

1.400-600mcg misoprostol orally or sublingually

2. Injection of prostaglandin (PGF2 alpha) 250mcg IM

3. Injection of oxytocin.

#### HYSTEROTOMY

This is not a preferred method for pregnancy termination.

It is helpful in the following conditions:

1. Failure with the other methods

2. Other associated gynaecological conditions

#### 2ND TRIMESTER ABORTION-

Approximately two third of all major complications occurs in 2 ndtrimester,though only 9 -11% terminations occurs in 2ndtrimester.hence special precautions should be taken to minimise complications and should follow MTP act.in 2nd trimester MTP can be done by medical or surgical or miscellaneous methods,rarelyhysterotomy is required.

Site-should be done at approved site ,at tertiary centre and as indoor patient.Patient should be admitted, prophylactic antibiotic and inj anti D -300mcg in Rh negative cases should be given.Proper counseling, informed consent ,facility and expertisation for complication management should be available.Documentation according to MTP act should be maintained.

Pre-procedure preparation-

Detailed history, clinical examination, investigations should be done to rule out any high risk factors.in scarred uterus ultrasound should be done to rule out scar ectopic.

Contraception counseling should be done at the same time.

#### MEDICAL METHOD FOR TERMINATION IN 2ND TRIMESTER ACCORDING TO WHO PROTOCOLS-

1. 200mg Mefepristone followed by 400/800mcg Mesoprostol every 3 hrs max-5 doses-s/l or vaginally

2. Or only Mesoprostol-400mcg every 03 hr s/l or vaginally

3.aPlacenta-not delivered in 2 hr----400mcg mesoprostol and 20 u oxytocin

4. Pain management-Tab Ibuprofen

**IN SCARRED UTERUS-** Dose should be tailored according to patient. Mesoprostol is not contraindicated in scarred uterus .Dose should be decreased with increased interval.

#### **Complications and Sequelae:**

- a. Shock
- b. Secondary Haemorrhage
- c. Infection/sepsis
- d. Continuation of pregnancy

#### Sequelae:

- a. Continuation of pregnancy
- b. Asherman's syndrome
- c. Pelvic Inflammatory Disease (PID)

1. Complications such as sepsis, haemorrhage and tissue injury are responsible for maternal morbidity and mortality related to abortion care

2. Universal stabilization measures should be provided to all cases of abortion complications and definitive management should be started immediately after establishing the diagnosis

3. Since primary level facilities cannot treat all types of abortion complications, timely referral after stabilizing the woman helps in the definitive treatment

#### At the time of discharge-

1. Contraceptive counselling with contraceptive provision, when requested

2. Address other health issues - anaemia, reproductive tract infections (RTIs), HIV, domestic violence, cancer screening

3. Suppression of lactation with tablet Cabergoline 0.5mg stat

4. Pain management with analgesics, NSAIDs

5. Provision of antibiotic therapy (tablet

Doxycycline 100mg for eight days or as appropriate

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**16** MANUAL VACUUM ASPIRATION (MVA)

Vacuum aspiration is a procedure that uses a vacuum source to remove an embryo or fetus through the cervix(1.) This procedure is one of the easier and safe ways to perform the procedure.

#### **History:**

Vacuuming as a means of removing the uterine contents, rather than the previous use of a hard metal curette, was pioneered in 1958 by Dr. Wu Yuantai and Dr. Wu Xianzhen in China. But their paper was only translated into English on the fifteenth anniversary of the study that "ultimately led to the technique becoming the world's most common and safest obstetric procedure."(2)

In Canada, the method was pioneered and improved on by Henry Morgentaler, achieving a complication rate of 0.48% and no deaths in over 5,000 cases. He was the first doctor in North America to use the procedure.(3)

Harvey Karman in the United States refined the technique in the early 1970s with the development of the Karmann cannula, a soft, flexible cannula that avoided the need for initial cervical dilatation and so reduced the risks of puncturing the uterus(4)

#### Indication (5):

1) Induces abortion of up to 12 weeks gestation / uterine size

2) Incomplete abortion of up to 12 weeks of gestation/uterine size.

3) Missed abortion.

4) Hydatidiform mole of up to 12 weeks gestation / uterine size.

5) Removal of deciduas with surgical management of an ectopic pregnancy.

#### **Contraindications(5):**

1) Presence of acute cervical, vaginal or pelvic infectio. The procedure should only be done under peri operative antibiotic cover.

- 2) Suspicion of perforation.
- 3) Suspicion of ectopic pregnancy.

Relative contraindications:

- 4) Adolescents
- 5) Nulliparae
- 6) Cervical stenosis
- 7) Pregnancy with uterine fibroids
- 8) Histoty of cesaerean section or uterine surgery
- 9) Medical disorders such as: Anemia with hemoglobin below 8g% Bleeding disorders Hypertension Heart disease Renal disease Diabetes mellitus

#### Safety and efficacy:

Various studies have demonstrated that vacuum aspiration is a very Safe and effective technique for first trimester abortion; it is successful in over 98% of cases. Acknowledging the superior efficacy and safety of the procedure over conventional dialatation and curettage a joint recommendation by the WHO and the FIGO states that properly equipped hospitals should abandon D&C and adopt manual/ electric aspiration methods.

	VACUUM ASPIRATION	DILATATION AND CURETTAGE
Incidence of excessive bleeding	less	2-4 times higher
Dilatation requirement	lesser	Greater
Pain control medication	Lower level	Higher level
Recovery period	lesser	More
Post procedure bleeding	lesser	more

#### **Equipment for VA:**

Vacuum aspiration can be performed using either MVA or EVA. The primary difference between the two VA options is the source of the vacuum - MVA uses a handheld, portable aspirator whereas EVA employs an electricity-operated device, which is referred to as the EVA or suction machine.

Manual Vacuum Aspiration In an MVA procedure, a handheld plastic aspirator providing a vacuum source is attached to a cannula and hand-activated to suction out the uterine contents. MVA aspirators are essentially of two types:

• single-valve (also referred to as the menstrual regulation [MR] syringe) and

• double-valve aspirators.



Key Features of the Two Types of MVA Equipment:

FEATURES	D V ASPIRATOR	S V ASPIRATOR
Capacity	60cc	50 cc
Negative pressure	26 in /660 mm Hg	26in/ 660 mm Hg
Cannula size used	Upto 12 mm	Up to 6mm
Vacuum maintained	Till 80% full	Till 50% full
Material used for valves	Silicone	Latex
Sterilization option	Chemical sterilization, boiling, autoclaving	Chemical sterilization.

Electric Vacuum Aspiration EVA uses an electric pump or suction machine attached to a cannula to evacuate uterine contents. EVA is typically used in centralised settings with higher caseloads.

**Cannula:** The two varieties of plastic cannulae available for use with an MVA aspirator and EVA machine are:

- 1) Disposable, single-use cannula (Karman)
- 2) Autoclavable, reusable cannula (EasyGrip).

Depending on the type of raw material used in the manufacturing process, the processing options of cannulae from different manufacturers vary significantly. The preferred size of the cannula as per the gestation age/uterine size are:

UTERINE SIZE	PREFERERD CANNULA SIZE
4-6 WEEKS	4-6MM
7-9 WEEKS	6-10MM
9- 12 WEEKS	8-12 MM

Pre-procedure Care :

Clinical assessment before the procedure and the investigations required are the same as for other techniques of pregnancy termination. Counsel the woman and explain each step of the procedure. Preparation for the procedure:

Shaving the perineum and vulva is not recommended. Perineum hair could be trimmed.

Obtain informed consent for the procedure in Form C (if not already obtained)

Fulfill all the statutory and procedural requirements of the MTPAct and Rules

A dose of oral analgesic/antispasmodic should be given an hour before the procedure.

Administer a single dose of prophylactic antibiotic such as oral ampicillin/ azithromycin1gm and Metronidazole 800mg. Doxycycline 100mg BD should be continued for seven days Preliminary steps

Ensure the availability and preparation of all instruments and drugs.

Ensure that emergency drugs and equipment are readily available

Pain control Medication for pain management should always be offered. The purpose of pain control is to alleviate the woman's discomfort where mechanical dilatation is required for surgical abortion and to ensure that she suffers minimal anxiety, discomfort and risk to her health. While the choice of the anaesthesia should be with the woman, local anaesthesia is a feasible, effective and safe method of providing pain relief during a VA procedure. A combination of oral analgesic and/or local anaesthesia (paracervical block) should help to control the pain in the first trimester abortion. Young, very anxious women and cases of suspected cervical stenosis may require general anaesthesia.

#### Procedure for Vacuum Aspiration : Manual Vacuum Aspiration :



Steps of MVA Procedure



Figure 13



Figure 14





Step 1: Prepare instruments, Charge aspirator,

Leave it charged for a few seconds.l

Push buttons to release vacuum. A rush of air indicates vacuum was retained.

Replace MVA aspirator when :

- o Cylinder is cracked or brittle
- o Mineral deposits inhibit plunger movement
- o Valve is cracked, bent or broken
- o Plunger arms do not lock
- o Aspirator no longer holds vacuum

Step 2: Prepare the woman .Ensure pain control medication is given at the appropriate time .Ask the woman to empty her bladder

Step 3: Perform cervical antiseptic preparation. Use an antiseptic such as Povidone Iodine to clean the cervix and vaginal walls .Perform a bi-manual examination to confirm the assessment findings. Close the valve buttons

Step 4: Administer paracervical block .Use Lignocaine one per cent (10ml; never more than 20ml). Give the paracervical block using a 22-24 gauge needle. There is increasing evidence to show that pre-testing before the administration of local anaesthesia need not be mandatory. Apply slight traction with the volsellum/Allis forceps to identify the area between the smooth cervical epithelium and the vaginal tissue. Insert the needle just under the epithelium to a depth of 1.5-2cm at 4 and 8 o'clock positions and inject 2-4ml of Lignocaine at each site Figure 12: Paracervical Block 1 Proceed with MVA after allowing 2-4 minutes for the local anaesthesia to be effective It is vital to aspirate before injecting the Lignocaine to ensure that the needle is not in the blood vessel.

Step 5: Dilate the cervix .Use a plastic cannula instead of a dilator to dilate the cervix . Use a progressively larger plastic cannula till it fits snugly in the os to hold the vacuum.

Cervical priming It is not mandatory to perform pre-procedure priming for all women. However, it should be done in women with high risk of cervical injury or uterine perforation. In pregnancies of more than nine weeks gestation (particularly in nulliparous women and women under 18 years of age), cervical priming may be administered. This will soften the cervix so that it is easily dilatable up to the desired size with a reduced risk of immediate complications.

The commonly used methods for cervical priming are: Tablet misoprostol 400 mcg administered sublingual 2-3 hours or vaginally 3-4 hours before the procedure. Injection 15 Methyl F2 Alpha Prostaglandin 250mcg intramuscularly 45 minutes before the procedure. This should be an option when there is less time available for cervical preparation before the procedure and misoprostol cannot be used

Step 6: Insert cannula Gently apply traction to the cervix. Rotate the cannula while applying pressure for easy insertion.

Step 7: Suction of uterine contents. Attach charged aspirator to cannula .Release buttons to start suction . Use a gentle rotatory and in and out motion to aspirate contents .Do not withdraw the cannula opening beyond the external os till all the POCs are aspirated . Take care to avoid holding a charged aspirator by the plunger arms

#### Signs that the uterus is empty :

Red or pink foam without the tissue passing through the cannula

Gritty sensation over the surface of the uterus

Cervix gripping over the cannula

Uterus contracting around the cannula l Increased uterine cramping

Check curette: Generally vacuum aspiration procedures can be safely completed without intrauterine use of curette or other instruments. No data suggest that the use of curettage after VA decreases the risk of the retained products.

When the procedure is complete . Push buttons down and forward to close the valve . Disconnect the cannula from the aspirator or remove the cannula from the uterus without disconnecting, depending on the completeness of the procedure . May evacuate again after inspecting the products of conception, if needed. Step 9: Concurrent procedures When the procedure is apparently complete, wipe the cervix with a swab to assess bleeding. Proceed with contraception methods such as sterilization, IUCD insertion.

Step 10: Instrument processing Proper processing of instruments entails four steps:

(A) Instrument soak The use of instrument soak in chlorine solution (0.5%) assists disinfection and helps remove tissue and body ?uids. This also makes cleaning easier by keeping the instruments wet.

The used cannulae should be ?ushed before soaking them. Chlorine solution (0.5%) for instrument soak in a plastic container is made by dissolving three levelled teaspoons (15gm) of bleaching powder in one litre of water. An appropriate quantity of the solution can be increased in the same proportion. Soak the instruments in disassembled form for 10 minutes.

(B) Cleaning: To clean the instruments, wash all the surfaces of the instruments in warm water and detergent. Soap is not recommended as it tends to leave a residue.

#### **Comparative Features of the Vacuum Aspiration Techniques:**

S.No.	Feature	MVA	EVA
A. Sim	ilarities		
1.	Effectiveness	98-100%	98-100%
2.	Time taken for the procedure	5-15 minutes	5-15 minutes
3.	Pain relief with oral analgesic and local anaesthesia	Adequate	Adequate
4.	Injury to cervix and vagina	Rare	Rare
5.	Congenital anomaly in method failure	None	None
B. Dif	ferences		
1.	POC check	Possible and easy	Difficult and cumbersome
2.	Electric supply	Not required	Essential
3.	Regular maintenance	Less	More intensive
4.	Equipment noise during the procedure	None	Present. Sometimes disturbing for the woman
5.	Cost-effectiveness	Less resources required	More resources required. Higher maintenance

#### **Complications and Management:**

While complications with vacuum aspiration are rare, awareness of their possibility and prompt attention and management when they do occur are vital.

- 1)Complications due to local anaesthesia.
- 2)Complication during procedure:

(ii) Uterine Perforation		
Signs and Symptoms	Management	
<ul> <li>Sudden loss of resistance with the instrument in utero</li> <li>Dilator or cannula penetrates further than expected</li> <li>Fat/omentum (yellow coloured) or bowel seen in the cannula or at the cervix</li> <li>Difficulty in withdrawing the cannula</li> <li>Rapid pulse and falling blood pressure (signs of shock)</li> <li>Severe abdominal pain</li> <li>Abdominal rigidity and distension</li> <li>Shoulder pain</li> </ul>	<ul> <li>Stop the procedure as soon as possible and remove the instruments</li> <li>Trendlenberg position (elevate the foot end of the bed and lower the head end), if there is hypotension</li> <li>Start intravenous fluids (RL or NS)</li> <li>If the perforation is with a cannula/dilator of less than 8mm, either complete the procedure immediately under USG/laparoscopic guidance or after 48 hours, if she is stable. If she is unstable or continues bleeding or a bigger size cannula was in use, refer to the next higher level of care following protocols of referral</li> <li>If intestine or omentum is seen on cannula, start an intravenous infusion and antibiotics. If properly equippe with complete laparotomy facilities, perform MTP in the facility itself under USG/laparoscopic guidance or refer to a higher level facility</li> <li>During transport, a trained healthcare provider should accompany the woman: continue oxygen, IV therapy, keep the woman warm and keep her feet elevated</li> </ul>	

(i) Haemorrhage		
Symptoms and Causes Management		
Signs/Symptoms:	In case of cervical injury:	
<ul> <li>Heavy, bright red vaginal bleeding with or without clots</li> <li>Blood-soaked pads, towels or clothing</li> <li>Pallor</li> </ul>	<ul> <li>Apply pressure with a sponge</li> <li>Suture with chromic catgut or any other suitable absorbable suture 1-0 using a round body needle, if required</li> </ul>	
Causes:	In case of bleeding from the uterine cavity:	
<ul> <li>Cervical injury, which may have been caused by the volsellum or difficult dilatation</li> <li>Incomplete emptying of uterus</li> </ul>	<ul> <li>Give tablet misoprostol 400mcg sublingual/or 600mcg orally</li> <li>Uterine massage</li> </ul>	
<ul> <li>Incomplete emptying of uterus</li> <li>Uterine atony (soft and boggy uterus)</li> <li>Perforation of uterus (instrument passed beyond the uterine wall)</li> </ul>	<ul> <li>If the bleeding continues, start oxytocin infusion 10 units in 500ml RL or NS at 40-60 drops per minute</li> <li>Vacuum aspiration may have to be done if evacuation is not complete or bleeding continues</li> </ul>	

(iii) Fainting/Syncope		
Symptoms and Causes	Management	
This occurs usually when the cervix is forcefully dilated. Severe pain is experienced and the woman faints due to a vaso-vagal attack causing marked bradycardia. This may last only for a few seconds to minutes, provided the pain is controlled.	<ul> <li>Stop the procedure immediately</li> <li>Maintain an open airway</li> <li>Avoid aspiration of vomitus by turning the woman's head and shoulder to one side</li> <li>Trendlenberg position (elevate the foot end of the bed and lower the head end)</li> <li>Administer injection atropine sulphate 0.6 mg I/V. Repeat after two minutes if response is inadequate</li> <li>If recovery is not immediate, ventilate with an ambubag and administer oxygen</li> <li>Start I/V fluids and monitor vital signs</li> </ul>	

### 3)Delayed complications;

(i	) Incomplete Abortion
Symptoms and Causes	Management
<ul> <li>Pallor</li> <li>Excessive or prolonged bleeding per vaginum</li> <li>Fever or pain in the abdomen</li> <li>Main Cause: <ul> <li>Incompleteness of the procedure</li> <li>(It may be prevented by checking the quantity of evacuated POC in VA)</li> </ul> </li> </ul>	<ul> <li>Depending on the general condition of the woman and the severity of bleeding:</li> <li>Stabilise the woman first, if required, with the measures mentioned in the table above on 'Shock'</li> <li>Give tablet misoprostol 400mcg sublingual/or 600mcg orally and observe her for decrease in the vaginal bleeding* or</li> <li>Evacuate the uterus with VA for retained products of conception under antibiotic cover</li> <li>*May be administered by nursing personnel for management or before referral to next level of facility, if required</li> </ul>
	(ii) Infection/Sepsis
Symptoms and Causes	Management
<ul> <li>Chills, fever</li> <li>Foul smelling vaginal discharge</li> <li>Abdominal pain or cramps</li> <li>Distended abdomen</li> <li>Rebound tenderness</li> <li>Prolonged bleeding</li> <li>Main Causes:</li> <li>Retained POCs</li> <li>Asepsis not properly maintained</li> </ul>	<ul> <li>Broad-spectrum antibiotics: Ampicillin/Azithromycin 1g and Metronidazole 400mg should be started</li> <li>Injectable antibiotics and intravenous fluids may have to be used if signs of severe infection exist</li> <li>Evacuate the uterus with VA for retained POCs Uterine evacuation performed on an infected uterus can more easily result in perforation, so it should be done with caution</li> </ul>

#### 4)Remote complications:

- Menstrual disturbances
- Infertility may be due to tubal factors
- Recurrant abortion
- Ectopic pregnancy
- Obstetric complications
- Psychosomatic complications.

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# **17** Post MTP Counseling and Follow up

## Dr Shobha N Gudi

**Post MTP care is an important part of Comprehensive abortion care and** is also an important opportunity to provide the woman with **the following :** 

- 1. Counseling and information
- 2. Follow up care
- 3. Contraception

Counseling and information :

It is normal to experience some bleeding off and on for a month, may be initially heavy as a period for a week and then decreases.More bleeding on straining and less on resting is to be expected1.

Mild intermittent cramping abdominal pain for a few days is normal, relieved with mild analgesics.

Normal diet can be resumed on same day.

Restrict activities and travel for one or two weeks.

Early return of fertility to be expected, even before the next menstrual period.

Sexual intercourse to be avoided till bleeding stops and effective contraceptive method of her choice is in place.

It is normal to expect a range of emotions : relief, regret, mild depression or emotional instability.

Normal menstruation may follow after one or two months2.

Before discharge, the following check list can be followed:

• Contraceptive counseling and contraception provision.

- Adequate Treatment of anemia and infections.
- Special care in case of HIV positive women.
- Address domestic violence if suspected

• In second trimester abortions, lactation suppression with Cabergoline 0.5mg stat oral.

• Discharge instructions as above, in addition to analgesics (NSAIDS or Acetaminophen), antibiotics Doxycycline 100 mg bid for a week.

#### **Follow-up Care**

A follow up visit is scheduled within two weeks of MTP.

#### However, she needs to visit earlier if :

- There is fever > 100.40 F or chills.
- Heavy bleeding
- Severe pain not relieved by analgesics
- Foul smelling discharge
- Excessive fatigue
- Vomiting and upper abdominal pain.

The above symptoms must alert us to look for the major complications of hemorrhage due to incomplete abortion, sepsis or visceral injury like bowel injury in a surgical abortion. On a routine follow up visit, any unusual symptoms should be asked for, excess bleeding per vaginum, undue pain, discharge or fever as outlined above. The medical records to be reviewed, contraceptive choice to be established, provide related services like correction of anemia etc. and document the facts in the patients file. One of the major complications which may manifest late is Infection and sepsis. A woman can present with infection any time from several days to several weeks after an abortion. Infection may be limited locally (uterus or cervix) or may become generalised sepsis3.An important part of follow up is a discussion on reproductive planning and contraceptive need. This is a highly pertinent situation of unmet need where an unintended pregnancy has been terminated and unless care is taken ,there is a risk of being repeated4.

#### Post abortal contraception.

All women undergoing induced abortion should be informedabout their ability to get pregnant following an induced abortion as early as before the first period.Fertility returns quickly, with the first ovulation post abortion happening 3 to 4 weeks, and so personalized contraceptive counseling and provision is a critical component of care. It involves reviewing the woman's contraceptive preferences (ie, efficacy, convenience) and offering all suitable contraceptive methods so the woman can choose a method as part of a shared decision making that meets short- and long-term planning needs5. Most contraceptives can be started immediately.

As with other preventive care efforts such as smoking cessation, education and counseling by health care providers positively impacts behavior5. In general, contraceptive counseling includes general counseling on strong need for contraception and reviews method safety, efficacy, mechanism(s) of action, side effects, protection from sexually transmitted infections (STIs), and other method-specific characteristics such as non contraceptive benefits.

**Specific counseling considerations**<sup>6</sup> in this setting include the following:

- Identify reasons for method failure in the past
- Explore patient's short- and long-term reproductive plans

• Rule out Underlying medical or gynaec conditions.

• Assess **risk of sexually transmitted** infection and advice to use condoms (male or female) in addition to their chosen method for pregnancy prevention.

• Contraceptive effects on post abortion recovery - Immediate initiation of contraception at the time of induced abortion does not impact the post procedure recovery process. No significant differences have been reported for thromboembolic events, infection rates, patientreported pain ,alteration of bleeding patterns following abortion. Rarely, some complications may limit the available contraceptive options (eg, women with postprocedure hemorrhage or infection are not candidates for immediate intrauterine device [IUD] insertion).

When to start ? All forms of contraception are safe and feasible to begin on the day of the procedure. This eliminates barriers of additional visit, cost, time, yields higher patient satisfaction, higher use rates, and lower repeat unintended pregnancy rates, this is especially true for all LARC methods7. The methods include IUD placement; subdermal implant placement; permanent contraception (sterilization); depot medroxyprogesterone acetate injection; and initiation of oral pills, transdermal patches, or vaginal rings. In general, contraception is started when it is confirmed that the abortion is complete, by direct visualization of tissue or with ultrasound, there is no retained products, no injury to genital tract and no infection. With first-trimester medication abortion, it has been shown to be safe to place an IUD as early as one week following treatment if it has been determined that the uterus is empty.

The biggest impact on reducing unintended pregnancy is the immediate provision of longacting contraceptive methods, such as the IUD or implant, because continuation of use to 6 or 12 months is higher than with the use of shorter acting methods.

Is back-up contraception necessary ?- If a woman starts contraception a week after the procedure is over, a second method of contraception (ie, backup contraception) like a barrier is needed until the primary method is effective ,foreg. An injectable contraceptive like DMPA.However , there are exceptions, the copper IUD, is immediately effective and progestin-only pills, requires only two days of back-up contraception

When women are uncertain of choice or decline contraception: It is essential discuss condoms (male and female), emergency contraception and natural methods.

Contraceptive options in brief:

Permanent contraception (sterilization) - Tubal ligation (laparoscopy or mini laparotomy) can be safely performed immediately following a first- or second-trimester abortion. Non scalpel vasectomy for the male partner also can be advocated.

Long-acting reversible contraception

Intrauterine device - An intrauterine device (IUD) can safely be inserted at the completion of a surgical first- or second-trimester induced abortion and after medical management in the second trimester8. The only exception is first-trimester medication abortion, an IUD can be inserted as early as one week following treatment after verifying that the uterus is empty. Expulsion

rates are increased after a second-trimester procedure but the benefits outweigh the risks.Contraindications for IUDs are when complications like hemorrhage, uterine perforation, hematometra or septic abortion have happened ,other methods are more suitable here once patient has recovered.

Progestin-only implant - The progestinonlyetonorgestrel implant is safe in all cases of abortion, either trimester and any method.9,10

Depot medroxyprogesterone acetate has no risks specific to the postabortion setting of any trimester and either method. Some concern has been raised about mifepristone efficacy with concurrent administration of DMPA compared with delayed administration (3.6 versus 0.9 percent) and whether second dose of mifepristone needed which is under study.But overall success rates for both groups were above 90 percent11. Subcutaneous DMPA 104 mg is absorbed slowly and has lower peak serum levels of hormone, it remains to be studied.

Short-acting reversible contraception - Short acting contraceptives include, combined estrogenprogestin methods (eg, oral pill, transdermal patch, vaginal ring), progestin-only pills, and barrier methods (ie, female and male condoms). These methods are moderately to less effective options.

Combined estrogen-progestin contraceptives - All combined estrogen-progestin contraceptive methods (oral pill, transdermal patch, vaginal ring) can be started immediately following first- or second-trimester abortion. Progestin-only pills - Progestin-only pills can be started immediately following spontaneous or induced abortion in the first or second trimesters12. Unless the medication is started on the day of surgical abortion, patients are advised to use backup contraception, or abstinence, for two additional days.

**Barrier contraception -** Barrier methods (female and male condoms) can be used immediately following medication or surgical abortion. They provide the added benefit of protecting from sexually transmitted infections, particularly for male condom.

Medical termination of pregnancy is a defining moment in a woman's life, a decision which impacts her physical and emotional health. Safe abortion service is complete only when quality of care is maintained through the subsequent weeks and every care is given for facilitating a planned next pregnancy by choice

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Dr Ritu Joshi

"Contraceptives should be used at every conceivable occasion."

Spike Milligan

#### Introduction-

India's population by the year 2050 is projected to reach 1.53 billion, making it the most populous country in the world. The current approach in Family Planning is to offer high quality contraceptive services among eligible clients, laying stress on adequate spacing of births. As per NFHS-5, the contraceptive prevalence in India is 535%, which varies widely among different states and the unmet need for family planning is higher at 12.9%.Promoting the use of contraceptive methods to prevent unwanted pregnancies is one of the most effective strategies to reduce abortion rates and maternal morbidity and mortality. Therefore, providing post abortion family planning services that include structured contraceptive counseling with free and easy access to contraceptive methods can be suitable.

Both these should be an integral part of abortion care or post abortion care to help the women to avoid another unplanned or unwanted pregnancy and risk of unsafe abortion. This is one of the reasons that one of the strategies proposed by International Federation Gynecology and Obstetrics (FIGO) initiative for the prevention of unsafe abortion and its consequences. Recent evidence suggests that post abortion contraception should have two attributes to ensure maximum effectiveness in prevention of repeat unintended pregnancy, and a repeat safe or unsafe abortion. Firstly, it should be provided before the woman leaves the health care facility where she had received the abortion care, and secondly, preference to long-acting reversible contraception (LARC) or at least depot-medroxyprogesterone acetate (DMPA) should be given.

Return of fertility after abortion-

Woman's future fertility after an uncomplicated abortion has no negative consequences. Ovulation can occur as early as 8 days after an abortion and 83% women ovulate during the first cycle following and abortion2. After a surgical abortion fertility does not differ from that following a firsttrimester medical abortion. And more than half of the women have sexual intercourse within 2 weeks after induced abortion3. It is important to offer and initiate the use of an effective contraceptive method without any delay after termination of pregnancy or following treatment of incomplete abortion.

## Safety of providing contraception immediately following an abortion-

The WHO Medical Eligibility Criteria for contraceptive use states that the use of combined hormonal contraceptives and progestin-only pills may be initiated immediately after an abortion4. The post abortion bleeding is unaffected by immediate initiation of one of these contraceptive methods. These methods can or should be started on the same day as misoprostol is used for a medical abortion, on the day of surgery in cases of surgical abortion or on the day of discharge from hospital following treatment of incomplete or spontaneous abortion. Implants are routinely inserted immediately after a first trimester surgical abortion. WHOMEC states that IUDs can be inserted immediately after a first trimester abortion, spontaneous, or induced abortion. Progestroneonly injectable contraceptives (DMPA or norethisterone enanthate) can be administered immediately following a surgical, medical or spontaneous abortion. According to WHOMEC sterilization can be performed after an uncomplicated abortion, but should be avoided in case of any complication. Barrier methods can be initiated as soon as required. Diaphragm and cap are unsuitable until 6 weeks after a second trimester abortion. Dual protection be recommended when there is a risk of transmission of sexually transmitted infection or HIV. Emergency pills should be offered to women relying on less effective methods. Natural family planning methods cannot be used until the menstrual cycle has resumed.

#### **An Informed Choice Strategy**

The principle of informed choice refers to decisions that people can make for themselves-not to a process that family planning programs and providers carry out. Nevertheless, programs, providers, and policy-makers can do much to support people's ability to make informed family planning choices. Programs can do so best by adopting a strategy that covers five areas-government policies, communication programs, access to family planning, leadership and management, and patient provider communication. This is where we as gynecologist can help and make a difference. We are the service providers and we can help by providing a "cafeteria approach" and allow them to make their choice.

1. Give our patients their desired family planning method unless it is medically inappropriate.

2. Provide clear, unbiased information on the advantages and disadvantages of the various contraceptive methods and explain correct use of the chosen method.

3. Tailor counseling and advice to each patient's expressed needs and personal situation.

4. Refrain from judging the patient and from holding preconceived perceptions about what is best for them.

5. Respect the patient's decision even if they choose a less effective method than your advice.

6. Respect the patient's decision to switch from one method to another.

Respect the patient's decision to refuse any or all services

#### **POST-ABORTION CONTRACEPTION**

A women's fertility can return quickly after an abortion or miscarriage- as soon as two weeks after (Bongaarts 1983). Yet recent data show high levels of unmet need for family planning among women who have been treated for incomplete abortion. This leaves many women at risk of another unintended pregnancy and in some cases subsequent repeated abortions and abortion related complications. (Save sieva et al 2002). Thus it is vital for programs to provide a comprehensive package of post abortion care services that includes medical treatment, family planning counseling and other reproductive health services such as sexually transmitted infection evaluation and treatment. Post abortion contraception choice is given below in the table-

Method	Time of administration	Advantages	Remarks
OC Pills Combined and progestin-only	May be given immediately after abortion using vacuum aspiration or confirmation of completed medical abortion	<ul> <li>Highly effective</li> <li>Can be started immediately, even if infection is present</li> <li>Can be provided by non-physicians</li> <li>Does not interfere with intercourse</li> </ul>	<ul> <li>Requires continued motivation and daily use</li> <li>Resupply must be available</li> <li>Effectiveness may be lowered with long-term use of certain medications, including rifampin, dilantin, and griseofulvin</li> </ul>
<b>Progesterone only</b> <b>contraception</b> DMPA, NET-EN	May be given immediately after abortion using vacuum aspiration or confirmation of completed medical abortion May be appropriate for use if the woman wants to delay choice of a longer-term method	<ul> <li>Highly effective</li> <li>Can be started immediately, even if infection is present</li> <li>Can be provided by non-physician</li> <li>Does not interfere with intercourse</li> <li>Not user-dependent, except for remembering to come for injection every two or three months</li> <li>No supplies needed by user</li> </ul>	May cause irregular bleeding, especially amenorrhea; excessive bleeding may occur in rare instances · Delayed return to fertility after stopping use · Must receive injections every two or three months
Intra-Utrine Device	IUD can be inserted after abortion using vacuum aspiration or after next cycles	<ul> <li>Highly effective Long-term contraception; effective for five to 10 years, depending on the type</li> <li>Immediate return to fertility following removal</li> <li>Does not interfere with intercourse</li> <li>No supplies needed by user</li> <li>Requires only monthly checking for strings by user</li> <li>Only one follow-up visit needed unless there are problems</li> </ul>	<ul> <li>May increase menstrual bleeding and cramping during the first few months.</li> <li>May increase risk of pelvic inflammatory disease (PID) and subsequent infertility for women at risk for RTIs and STIs (HBV and HIV/AIDS)</li> <li>Trained provider required to insert and remove</li> </ul>

Tubal Ligation	It is to be performed after next menstrual cycles.	<ul> <li>Permanent method</li> <li>Highly effective</li> <li>Once completed, no further action required</li> <li>Does not interfere with intercourse</li> <li>No change in sexual function</li> <li>No long-term side effects</li> <li>Immediately effective</li> </ul>	<ul> <li>Adequate counseling and fully informed consent are required before VS procedures</li> <li>Slight possibility of surgical complications</li> <li>Requires trained staff and appropriate equipment</li> </ul>
Condoms	As soon as she resumes her sexual activity	<ul> <li>Prevents STDs, including HIV/AIDS</li> <li>Safe. No hormonal side effects</li> <li>Can be used without seeing a health care provider first</li> <li>Usually easy to obtain and sold in many places</li> <li>Enable a man to take responsibility for preventing pregnancy and disease</li> </ul>	<ul> <li>Latex condoms may cause itching for a few people</li> <li>Small possibility that condom will slip off or break during sex</li> </ul>
Vasectomy	This procedure can be done independent of the abortion procedure	<ul> <li>Very effective</li> <li>Permanent</li> <li>No interference with sex</li> <li>No supplies to get, and no repeated clinic visits required</li> <li>No apparent long-term health risks</li> </ul>	<ul> <li>Not immediately effective. At least the first 20 ejaculations after vasectomy may contain sperm. The couple must use another contraceptive method for at least the first 20 ejaculations or the first 3 months-whichever comes first</li> <li>No protection against sexually transmitted diseases (STDs) including HIV/AIDS.</li> </ul>

Method	Time of administration	Advantages	Remarks
Emergency Contraceptive Pills	May be used immediately after abortion using vacuum aspiration or confirmation of completed medical abortion	• Important back-up method when contraception fails fo example, condom breaks), when no method is used or when sex is forced	<ul> <li>Providing emergency contraceptive pills in advance as a back-up method may help prevent future unwanted pregnancies</li> <li>No protection from STIs/HIV</li> <li>Generally less effective than other contraceptive methods</li> <li>May have side-effects such as nausea and vomiting</li> </ul>

\* This information applies to methods after first trimester abortion.

Male and female condoms are the only methods that provide protection against transmission of STI/HIV; they can be used in conjunction with all other methods.

#### **Conclusion:**

Family planning counseling and provision of an effective contractive method should be an integral part of post abortion care. Every year India adds the population of Sub-Saharan Africa to the earth. Improved obstetric services and child spacing could reduce maternal mortality in developing countries as they have in the developed world. Contraception should become a people's movement rather than be forced upon the people. People should insist on good quality, affordable contraceptive services as their basic right. Family planning should come to mean 'Fewer babies- But better babies'.

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# **19** COMPLICATIONS With MTP-(a) Haemorrhage

Dr. Sheela Mane

Dr. Neha Tabbasum

#### Introduction:

10-20% of pregnancies result in spontaneous abortion. Even after legalization of abortion in many countries unsafe abortion still remains major public health issue, cause third of all maternal deaths.

Haemorrhage is defined as bleeding more than or equivalent to 500ml which needs hospital admission with or without the need for blood transfusions. In the first trimester haemorrhage (14%) is the second common cause of abortion related mortality following infection (33%).

#### **Etiopathogenesis:**

#### UTERINE ATONY:

Most common cause of post abortion haemorrhage. The principal mechanism of uterine hemostasis is contraction of myometrium, which mechanically compresses the blood vessels supplying the placental bed. In addition local hemostatic factors such as tissue factor type 1 plasminogen activator inhibitor ,systemic coagulation factors such as platelets and circulating clotting factors also contribute in preventing haemorrhage. The delivery of placenta leaves disrupted spiral arteries which do not have myometrium and are dependent on contractions to mechanically squeeze them for hemostasis. Greater gestational age, advanced maternal age and previous scar on the uterus are associated risk factors.

#### **Abnormal Placentation:**

Placental invasion beyond the myometrium can be major risk factor complicating abortion. Incidence is raising due to increased rates of caesarean sections. Placental adherence can be due to primary deficiency of decidua, abnormal maternal vascular remodelling or excessive trophoblastic invasion. whenever there is excessive bleeding during late first trimester and mid trimester abortions low placentation in the uterine cavity marginal or complete placenta previa should be considered.

#### **Retained Tissue:**

Partial or complete retention of products (placenta and other decidual tissues) more common after medical abortion, can also occur after surgical abortion. It occurs frequently after second trimester abortions(3.6%). It may cause both primary or secondary obstetric haemorrhage, most significant cause of maternal morbidity and mortality.

Major cause of retained products is abnormal adherence of placenta to underlying uterine wall. Pt usually present with abdominal pain, bleeding and fever.

#### **Cervical Lacerations:**

Forced dilatation always causes microscopic tears. High lateral cervical tears in area of uterine arteries can lead to hemorrhage. The use of injectable 15 methyl PGF2 alpha had distinct association with bucket handle tears of cervix, because of strong uterine contractions with lagging cervical dilatation. The medical priming of cervix for surgical abortion and use of misoprostol with or without mifepristone prepares cervix and gives it protection from injury.

#### **PERFORATION:**

Uterine perforation although rare extremely dangerous complication when it goes undiagnosed at the time of abortion.

Can lead to trauma to visceral structures or uncontrolled haemorrhage requiring hysterectomy, causing death.

Multipara, uterine anomalies have been found at higher risk.

The site of perforation is dependent on uterine position and is important as the visceral organs at that anatomical site are at risk of injury. posterior wall is more commonly involved in anteverted uterus, while anterior wall is perforated in retroverted uterus. Lateral wall can also be at risk if uterus is deviated to either direction.

Perforation likely to occur when there is discrepancy between surgeons estimate and actual size of uterus. Most common instruments are suction cannula, uterine sound or uterine dilator. It is particularly dangerous when assosciated with unsafe abortions because of accompanying sepsis and peritonitis.

#### **Bleeding Disorders:**

Women on anticoagulants and with bleeding disorders are at increased risk of haemorrhage.

Post abortion triad:

Pain, bleeding and fever are frequently seen in emergency situation and assosciated with retained products of conception.

Post abortion syndrome:

Progressive worsening abdominal pain and hemodynamic compromise in absence of vaginal bleeding. It is due to collection of blood/ products in uterine cavity causing uterine overdistension which is unable to contract in order to expel its contents and cervical stenosis.

#### **Estimation Of Haemorrhage:**

Vagina has capacity to hold 500 ml of blood without significant external bleeding hence a bimanual examination should always be performed. Intra uterine blood collection with hematometra can be diagnosed by pelvic ultrasound.

#### Management:

Levels of management of post abortion haemorrhage

Primary	<b>Cervical Laceration</b>	Pressure Suturing
	Atonic Uterus	Bimanual massage Uterotonic agents oxytocin, methyl ergometrine maleate, 15 methyl PGF2 alpha, misoprostol
Secondary	Atonic uterus , retained products or blood clots	Fluid resuscitation ,blood components transfusion ,tamponade effect , uterine pack, foleys catheter/ bakri balloon/ condom or glove Suction evacuation or manual vacuum aspiration under ultrasound guidance.
Tertiary	Intensive surgical interventions	Uterine artery embolization, compression sutures B lynch, Cho sutures, stepwise devascularization, laparoscopy or laparotomy for perforation hysterectomy.

#### Management of Atonic Uterus:

Stabilization of patient: Monitor vitals Trendelenburg position Blood investigations Fluid resuscitation Blood transfusion Broad spectrum antibiotics Mechanical methods: Empty the bladder Bimanual massage Uterotonic agents: Oxytocin 10 U in 500 ml saline Methyl ergometrine 0.2 mg IM/ slow IV 5 doses 2-4 hrs apart PGF2 alpha 250 microgram IM 8 doses every 15-20 minutes Misoprostol 800 microgram orally Uterine packing: Roller gauze Foleys catheter Condom catheter or glove Bakri balloon Conservative methods: Uterine tamponade RUSCH catheter Uterine artery embolization B lynch or Cho sutures Stepwise devascularization

#### Last Resort:

Total or subtotal hysterectomy

#### **Abnormal Placentation:**

Diagnosis made by ultra sound confirmed by MRI. Use of uterotonics prophylactically is mainstay of treatment. Conservative management, even placental preservation can be carried out with subsequent methotrexate therapy or pelvic artery embolization.

#### **Cervical injury:**

Cervix should be inspected visually and digitally. Small lacerations less than 0.5 cm will respond to adequate pressure. Highly vascular or lacerations greater than 1 cm need to be repaired using absorbable sutures. If bleeding persist uterine artery laceration should be considered and should be shifted to ot and explored.

#### **Retained Tissue:**

Ultra sound is useful in evaluating. If pt is stable uterotonic PGE1 can be used and pt can be reassessed a week after with ultrasound.

For persistent cases need for evacuation under hysteroscopic vision.

#### **Uterine Perforation:**

Cervical priming before procedure facilitates dilatation of cervix, minimising chance of perforation. Uterine evacuation should be done only when uterus is well contracted. Dilator and cannula should be passed just beyond internal os and products should be sucked from that position only.

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## **19** COMPLICATIONS With MTP-(b) Uterine Perforation

Perforation of the uterus can happen during any procedure in the uterine cavity. It can particularly happen during a surgical evacuation of products of conception as a part of the procedure of medical termination of pregnancy (MTP). Rarely it can be associated with injury to the adjacent viscera like bowel, bladder and blood vessels. It can be catastrophic to the mother if it leads to sepsis and hemorrhage.

#### Incidence:

The incidence of perforation of the uterus is from 0.4 to 15/1000 abortions. (1)

#### **Risk factors:**

1.Factors which impair access to endometrial cavity.

Acute anteflexed uterus, retroverted and retroflexed uterus, stenosis of the cervix

2.Factors which alter the uterine wall strength

Pregnancy, breastfeeding, previous uterine injury and previous cesarean scars.

3. Uterine anomalies

4.Other causes: older mothers, multiparity and inadequate training of the providers of the service.(2)

#### **Complications:**

Acute: There may be torrential bleeding which may necessitate a hysterectomy and blood transfusions. Hence urgent control of bleeding is necessary after a perforation.

**Chronic:** If not treated properly, can lead on to peritoneal adhesions, subacute intestinal obstruction, chronic pelvic pain and infertility

#### **Prevention:**

It is better not to perform a dilatation and curettage (D&C) forcibly. If the procedure results in a uterine perforation, it will need specialist management.

Prevention of the uterine injury is by an accurate assessment and preparation. The uterine size, position and attitude should be accurately estimated. The service provider should be experienced. Adequate cervical preparation with prostaglandins will be associated with a reduced cervical resistance and a reduced chance for an injury. Oral or vaginal prostaglandins can be used depending on the surgeon's preferences.

Using cervical dilators of gradually increasing size will also prevent an uterine perforation.

Ultrasound can be used to guide MTPs done surgically. They have proved to reduce the incidence of uterine perforations in difficult cases. They can also be used to guide if evacuations need to be completed after a complication like uterine perforation has occurred.(3)

The incidence of perforation is 0% in a RCT by Abdul Kareem et al when surgical evacuation is done under ultrasound guidance while it is 3% when ultrasound is not used.(4)

#### **Diagnosis:**

Uterine perforation is suspected if the following features are seen:

a. the cannula passes through for a longer distance than anticipated in the uterine cavity.

b. if there is no resistance when the cannula is passed

c. if there is difficulty in withdrawing the cannulad. if bits of omentum or intestine is seen in the

d. if bits of omentum or intestine is seen in the aspirate

e. if there is evidence of shock

#### Management:

Prevention of the problem is the best modality. Instant recognition of the complication with urgent intervention and continuous management is mandatory. This is necessary to reduce morbidity, mortality and long-term consequences of the uterine damage.

The surgeon's experience is crucial to avoid the complication and for early recognition of the injury.

The management will depend on

a. The site of the perforation

b. The completeness of the procedure

c.Gestational age

d.Adjacent organ damage

e.Hematoma formation

f.Ongoing bleeding

Once the problem is identified, the procedure is stopped at once and the cannula is removed.

No uterotonics like oxytocin or methergine are given.

If the patient is in shock, it is managed urgently.

Intravenous fluids are started and antibiotics are given.

A bedside ultrasound is done to confirm the completeness of the evacuation. If evacuation is complete, the patient is monitored for 24 hours. Uterotonics are given to reduce bleeding. (5)

## If perforation is suspected and the evacuation is not complete:

The procedure is stopped.

Patient is stabilised by giving adequate intravenous fluids or cross matched blood if necessary. Antibiotics are started.

The uterus is visualised with ultrasound if the patient is stable. If there is no evidence of bleeding or injury to adjacent organs, the procedure of evacuation is completed under ultrasound guidance.(6) If the patient is stabilised, she is observed for 24 hours.

If there is bleeding or suspected damage to adjacent organs, a diagnostic laparoscopy is done. If experienced laparoscopic surgeons are available and the perforated uterine wall is bleeding, laparoscopic suturing is done. The evacuation is completed under laparoscopic guidance.(7)

If there is extensive damage to the uterus and there is ongoing bleeding, a laparotomy is necessary. Hysterectomy may be needed to save the patient. (5,8)

If there is damage to adjacent organs, repair is done laparoscopically or by open surgery.

#### **Conclusion:**

Care is needed while performing surgical evacuation as a part of MTP. Experienced service providers should perform the procedure. Oral abortifacients have reduced the incidence of this dreaded complication. Service providers should take the utmost precautions as uterine perforation can lead on to severe morbidity, mortality and long term sequella

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# **19** COMPLICATIONS With MTP-(c) Sepsis

#### Background

Of the severe complications that affect women after an abortion, especially an induced unsafe procedure done by untrained providers, sepsis is one of the major ones. It contributes about 3-7% of post abortion care complications in a recent survey done in six Indian states.1 Infection is less common after a spontaneous miscarriage.

The causative organisms include beta hemolytic streptococci, staphylococci, Escherichia coli, Enterobacter aerogenes, Proteus vulgaris and Clostridium perfringens.

Usually, the products of conception become infected with infection spreading to the uterus through the maternal inter villous space finally resulting in bacteremia.

#### **Signs and Symptoms**

Signs and Symptoms mimic those of an acute pelvic infection. The patient presents typically 2-7 days after the procedure with fever, chills, vaginal discharge and abdominal pain. The diagnosis is mostly clinical, but history of a recent abortion may sometimes be concealed.

Features of peritonitis may suggest a perforation while heavy vaginal bleeding with an open cervical osmay indicate an incomplete abortion. Local genital trauma also needs to be ruled out which may need repair. If she is hemodynamically unstable, early shifting to the intensive care is appropriate. Surgical intervention may be necessary if abdomen bleeding or gut injury is suspected.

Patients can rapidly progress to refractory hypotension with multi organ failure secondary to massive capillary leakage.3 Features of septic shock are hypothermia, hypotension, oliguria and respiratory distress. Recognition of these symptoms would again necessitate intensive care support. If the health center does not have necessary infrastructure, the patient needs to be referred to the nearest tertiary care facility at the earliest.

#### Investigations

Aerobic and Anaerobic blood cultures should be sent before starting empirical antibiotics which can be changed later depending on the reports.

Blood tests may be collected while starting a wide bore IV channel for resuscitation. Complete blood count would be helpful to determine the need for blood transfusion. Rising white blood cell counts and a shift to the left would be a primary assessment to the degree of infection. This would be corroborated by other inflammatory markers like CRP and Procalcitonin. Coagulation parameters are important to detect a developing coagulopathy secondary to sepsis which would require transfusion of blood products and regular monitoring. Blood group and Rh typing needs to be known for the need of Anti-D prophylaxis if appropriate. Liver function tests, renal function tests and electrolytes are required for the initial assessment of a patient in sepsis.

Imaging methods should be employed to assess the uterine cavity for products of conception and the abdominal cavity for collection, ileus or bowel injury. A transvaginal sonography would be most suited for intra uterine retained products. Erect X Ray of the abdomen could reveal gas fluid levels in the bowels or gas under the diaphragm in cases of bowel perforation. The diagnosis is important as immediate laparotomy for repair is paramount to reduce morbidity and mortality. A USG of the whole abdomen would be helpful in revealing collection which may need early assessment and drainage.

#### Treatment

A multi-disciplinary team including an intensivist, infectious disease specialist and microbiologist would be ideal in managing difficult cases.

Intensive IV antibiotic medication and supportive therapy are the cornerstones of managing sepsis. Additional surgical procedures may be necessary in some cases.

One combination of Intravenous Antibiotics initially used include Ampicillin, Gentamicin and Metronidazole. This covers most of the gram positive, gram negative and anaerobic organisms responsible. Alternately, IV Clindamycin may be used in combination with Gentamicin. Evidence of definite advantage of one regime over another is lacking.4The culture report would guide necessary changes which may includestepping up to a Piperacillin-Tazobactam combination.

Supportive therapy is best instituted in an intensive care setting. Respiratory status should be stabilized first followed by perfusion maintenance. Crystalloid administration through wide bore IV channels, supplemental use of oxygen, careful fluid monitoring and transfusion of blood products as needed. Frequent use of arterial blood analysis and chest radiographs to track development of ARDS would also be necessary.

Surgical Intervention includes early evacuation of retained products if evident from clinical examination and supported by ultrasound. Laparoscopy in a clinically stable patient to assess perforation may be appropriate. Posterior Colpotomy under ultrasound guidance may be performed in select cases to drain a localized collection. Laparotomy would be necessary in cases of suspected bowel injury, foreign body in the abdomen, internal hemorrhage or a non-resolving peritoneal or pelvic abscess.5

#### Prevention

Primary Prevention includes access to effective contraception to avoid unwanted pregnancies in the first place. For contraceptive failure, safe abortion within the legal framework should be resorted to. Secondary Prevention requires early detection and to institute treatment. Any woman in the reproductive age group presenting with vaginal bleeding, lower abdominal pain and fever should be suspected.

Tertiary Prevention would mean to limit harm. Most often the patient would be in an intensive care setting where the aim would be to avoid a hysterectomy or prevent death and long-term disability from the condition.

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## **20** (a) MTP IN DIFFICULT CASES-Scarred Uterus

MTP is integral part of women reproductive health care. in Recent years, incidence of caesarean sections, myomectomy, hysterotomy, giving scar on uterus increased in large numbers so request for termination in scared uterus too.

**Scarred uterus** means women having incision on uterus once or many times. caesarean section is most common uterine surgery women have.such women have more risk for life threatening complications of termination of pregnancy like haemorrhage,scar dehiscence and rupture of uterus .hence such cases need especial emphasis

All legal eligibilities for case selection ,provider and facility has to be checked as in other cases according to MTP act

**Clinical workout** includes detailed history, clinical examination, necessary investigations, ultrasound and accordingly proper selection of method of termination .Detailed intraoperative and postoperative history of previous uterine surgeries, duration of last surgery with present pregnancy ,gestational age are important factor to decide method of termination and risk for complications. Medical history should include: hypertension ,heart disease ,diabetes mellitus , epilepsy ,asthma , drug allergies ,bleeding disorders , renal disease ,thyroid disease

**Counseling andinformed consent -** This should be done by senior obstetritian with detailed informations to patient about all variants of administration, their advantages and risks.

Individual approach is necessary.Potential complications, such as haemorrhage and uterinerupture constituting a life-threatening situation should be explained in patients language and informed consent should be taken.

**Preprocedure preparation-** obtain optimal hb level before procedure and accordingly arrange for blood transfusion and pre procedure antibiotics.

Resuscitation, transport facility or laparotomy facility has to be ensured according to gestational age, method selected and risks associated.

#### High risk factors for complications-

Multiple incision,2nd trimester abortion, uterine congenital anomalies ,upper uterine segment incision, history of infection after uterine surgery, duration of last surgery <1 yr is associated with more risk of life threatning complications like rupture,dehiscence and haemorrhage.

#### Role of ultrasound-

In all cases of scarred uterus who needs termination, ultrasound and Doppler should be used to rule out scar ectopic or adhered placenta .though it is not mandatory according to MTP act but advisable in all scarred uterus. beside that usg is helpful to find out congenital abnormality in uterus,correct gestational age and location of pregnancy. Ultrasound guided procedure can be done in high risk cases. post procedure follow up for completion of procedure or in cases of haemorrhage ,ultrasonography can be used for optimal management.

**Pain management-** optimal pain management minimizes risk of perforation .it ranges from oral analgesics with verbal support, paracervicalblock or short general anesthesia.in scarred uterus,if doing surgical procedure ,painful and forceful dilatation shouldbe avoided .proper cervical preparation is required.
Evacuation in scarred uterus -clinical methods

#### 1.Medical method-

it include drugs Mefipristone and Misoprostol in different dose protocols according to gestational age to induce and complete the abortion process

#### Dose protocols in unscarred uterus-

**In first trimester-** Mefipristone 200 mg followed by 400-800mcg Misoprostol after 48 hrs.According to MTP act -can terminate by medical method up to 9 wks OR 63 days of gestation.

**in 2<sup>nd</sup> trimester -** 200mg Mefipristone followed by 400-800mcg every 3 hrly according to WHO protocol.

oThis is very safe and effective method for termination, especially in first trimester,. **One of the major concerns about use of misoprostol in pregnancy is uterine rupture**, this risk increases in scarred uterus. There are several case reports of uterine rupture in the first trimester.but they, involve a predisposing factor such as uterine anomalies, prior uterine surgery, placenta percreta, or cesarean scar ectopic.

Dose protocols in scarred uterus-

Though ,no clear recommendation about dose and protocols in scarred uterus,but evidence says that misoprostol is not contraindicated in termination of pregnancy in scarred uterus.

 Various studies all over world shows that use of misoprostol in women with prior caesarean delivery was not associated with an excess of complications compared with women with unscarred uteri. Majority has no incidence of uterine rupture, when tailored dose is given.Misoprostol treatment was Equally Acceptable among women who received misoprostol, with 81% and 78% of women with and without prior uterine surgery, respectively, willing to use misoprostol again if needed (p=0.17). There was no difference in the acceptability of side effects, with 57% and 59% of women with and without prior uterine surgery finding the side effects somewhat or totally acceptable (p=0.52).(1)

• **Dickinson** published his results about scarred uterus. Misoprostol was used to induce abortion with 400 mg vaginally every 6 h and the presence of a prior uterine scar did not impact on abortion duration . **Bhattacharjee et al**. concluded that the use of misoprostol for mid trimester pregnancy termination is not contraindicated in women with Caesarean scar and is effective and comparable with those in women without scarred uteri.

• In study of 500 patients,205 patients had at least 1 caesarean scar(41% one,10% had prev 2 caesarean scar,11 % patients,prev 3 and 2% prev 4 caesarean scar) had successful termination in 74% cases of study gp(scarred uterus) in comparision to 67.8% in unscarred uterus. **Complication rate as** of uterine rupture was 0% in both groups(4)

• Fawzy and El Habdel- Hady 2012, used misoprostol 200 mg vaginally with 6 h intervals on the 1st day and double the dose to 400 mg with the same intervals since the 2nd day in the women with three or more prior cesarean sections. Their study had a 90.3% successful rate without any adverse outcome. However, for safety, they recommended that women with a scarred uterus should receive lower doses of misoprostol and do not double the dose if there is no initial response

• Daponte et al. (3) evaluated the safety and efficacy of misoprostol regimen in women with previous multiple caesarean sections. This was a retrospective cohort study of women with more than one caesarean section who underwent termination of pregnancy (TOP) with 400 m?g of vaginal misoprostol followed by 200 m?g/6 h (max 800 m?g). They did not report any major complication and considered the use of misoprostol effective and safe for termination of pregnancy in women with previous multiple caesarean sections

**Berghella et al.** (2)published their data and concluded that incidence of uterine rupture associated with second trimester misoprostol termination was 0.4% (2/461) in women with one prior low transverse, 0% (0/46) in those with two prior low transverse and 50% (1/2) in those with a prior classical caesarean delivery.

One of the cases of uterine rupture in a woman with a prior low transverse caesarean required transfusion. None of the total eight cases (including case reports) of uterine rupture was associated with hysterectomy.

Hence ,no evidence that a previous caesarean delivery affects the incidence of complications when women with such a history undergo a pregnancy termination with misoprostol.

Therefore, the use of misoprostol for pregnancy termination is not contraindicated in women with Caesarean scar and is effective and comparable with those in women without scarred uteri

#### DOSE-

The cases, which are high risk for complications should be given less amount of dose with increase interval like 200 to 400 mcg instead of 400 to 800 mcg on first day at 6 hrs interval instead of 3 hrs. Always check response before increasing the dose .Always remain vigilant for signs of dehiscence or rupture.

# Surgical Method Of Termination In Scarred Uterus-

- Vaccum Aspiration-manual Or Electric-mva/eva
- Dilatation And Evacuation
- Hysterotomy

**Hysterotomy** is last option, when all methods failed. Consent should be taken and patient should be told for probability. To avoid hystrotomy and successful outcome cervical preparation is very important step before evacuation

Cervical preparation/dilatation: It is recommended for all women undergoing the termination of pregnancy over 12-14 weeks.

• It decreases the risk of cervical injury and uterine perforation.

• Medication/devices/instruments are used for cervical prepartion on and dilatation before the evacuation of the POCs:

#### **Misoprostol/OSMOTIC**

Compared to laminaria, vaginal misoprostol requires a shorter period of time to achieve the

same dilatation, is associated with less discomfort and is preferred by women

• Misoprostol (400mcg) is used vaginally 3-4 hours or sublingually 2-3 hours before the procedure for cervical dilatation.

• One additional dose of 400mcg may be given if the dilatation is inadequate after four hours or dilators may be used.

• ROUTE- The sublingual route appears as effective as vaginal administration and requires less time for priming (2 h), but it is associated with more side effects. Oral administration can produce equivalent dilation to vaginal or sublingual administration, but higher doses and longer treatment

Advantages of using misoprostol for dilatation:

• It is a highly effective drug for inducing cervical dilatation and uterine contractions

• The administration of misoprostol leads to the contraction of the uterus even before the actual procedure is initiated, thereby reducing the amount of blood loss, possibility of perforation and the time taken for the procedure

• Disadvantages of using misoprostol for dilatation:

• It has GI side-effects, which can discomfort the woman

# VACCUM ASPIRATION-MANUAL OR ELECTRIC-MVA/EVA

• Vacuum Aspiration (MVA and EVA) is a safe technology for uterine evacuation upto 12 weeks LMP in scarred uterus

• An accurate clinical assessment, counselling and informed consent is a must before a VA procedure

• Ideal pain control during VA is a combination of verbal reassurance, oral analgesic (30-60 minutes before the procedure) and paracervical block

• VA procedure should be performed as per the protocol

• Evacuated tissue should be inspected for chorionic villi

• Follow-up visit should take place within one to two weeks after a VA procedure

#### Followup and post MTP Counselling-

Women should be closely monitored during and just after perocedure till 48 hrs.DO post abortion contraception counseling, if not adopted any contraceptive method

and called for follow up after 15 days of discharge.

#### **Take Home Message**

1. Mesoprostol Is Not Contraindicated In Scarred Pregnancy And Can Be Used In Tailored Dose

2. Rule Out Scar Pregnancy-by Usg And Doppler Before Procedure in Scar Uterus

3. Counsel Patient And Take Informed Consent For Additional Risk

4. Indoor Management With All Laprotomy Facilities -should Be Available For 2ndtrimester Termination In Scarred Uterus

5. Effective Pain Management Should Be Done

6. For Surgical Management-cervical Preparation And Use Of Mva Minimises Complication

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# **20** MTP IN DIFFICULT CASES-(b) Medical Disorders

### Dr Komal N. Chavan

Dr Deepali Prakash Kale

#### **Background-**

When a woman with medical condition opts for induced abortion, liaison with the woman's physician or another specialist can facilitate decision making regarding hospital referral and additional preparations that may be required.

Central Nervous System	Vascular-untreated aneurysm
	Space occupying lesions
Renal Disease	• Impaired renal function (serum creatinine>2.5 mg/dL)
Hypertension	• Uncontrolled BP (systolic blood pressure> 160 or
Hypertension	diastolic blood pressure >105)
	Uncontrolled hyperthyroidism
Endocrine	Uncontrolled diabetes
	Pheochromocytoma
Pulmonary	Uncontrolled asthma
r unnonar y	Restrictive lung disease Pulmonary hypertension
	Congenital (cyanotic disease
	• Right or left ventricular dilation
	• Uncontrolled tachyarrhythmia)
Cardiac	• Coronary disease - (H/0 of myocardial infarction,
	treatment angina)
	• Cardiomyopathy - (dilated hypertrophic,
	• History of peripartum cardiomyopathy)
	"Hepatic disease elevated PT
GI	"Esophagealvarices with h/0 bleeding
	"Uncontrolled inflammatory bowel disease
	"Severe anaemia
	"Sickle cell disease with crisis
Haematological	• "Idiopathic thrombocytopenia purpura with
	active thrombocytopenia
	• "Thrombophilia requiring anticoagulation

#### Table 2-Considerations for Different methods of Induced Abortions-

#### Surgical abortion preferred

# • Various anaesthetics options -tailored to the medical needs of the patient and administered in a setting with continuous monitoring.

- Sedation during surgical abortion is important as it may reduce tachycardia related to pain and anxiety.
- For women with a bleeding diathesis, surgical management offers direct observation and immediate uterine evacuation and less often leads to a delayed haemorrhage [24].
- Surgical abortion is preferred when methotrexate is contraindicated.

#### **Medical abortion preferred**

- Patients at risk of surgical and anaesthetic complications may benefit with management in the inpatient setting [15].
- A safer alternative for patients with extreme obesity, pelvic tumours that interfere with access to the cervix or a known history of serious reactions to anaesthetic agents.
- Suitable for Patients who cannot be given lithotomy positioning, in the context of orthopaedic (e.g., hip disease) or neurologic conditions (e.g., cerebral palsy).

Important Considerations for common chronic conditions

Type I Diabetes- Surgical/medical-

- These women more prone to hypoglycaemia in the first trimester.
- Disruption of glycaemic control due to -An initial increase in insulin requirements for the first trimester is followed by a reduction in insulin requirement between 7 and 12 weeks of gestation & Hyperemesis.
- Local anaesthesia A regular diet and usual medication can be continued before and after abortion
- Deep sedation preprocedure fasting, Reduce the patient's usual long-acting insulin dose the evening before to half, omit the morning dose of short acting insulin.
- Scheduled first or as an early case in the day.
- Post-procedure- medication requirements may decrease.
- Liaison of care with her medical provider is recommended.
- Post abortion contraception -all options.

• The use of combined hormonal contraception, is usually contraindicated for women with evidence of vascular disease or end-organ damage

#### Hypertension-

- Often clinically silent and undertreated in young women.
- For women with mild to moderate hypertension Outpatient setting- appropriate
- Poorly controlled hypertension [systolic blood pressure (BP)> 160 mmHg; diastolic BP >105 `mmHg]--Hospital setting.
- Ergot drugs should be avoided in women with hypertension; oxytocin and misoprostol are acceptable uterotonic agents for such patients.

#### **Obesity-**

• Surgical abortion for obese women may be associated with increased technical difficulty.

- Ventilation difficulties with deep sedation may be more common with obese patients.
- Consultation with an anaesthesiologist may be helpful.
- Post abortion contraceptive Options-All.

### Epilepsy

- Women with well-controlled epilepsy may receive outpatient abortion care.
- Those with recent onset or uncontrolled seizures may benefit from hospital-based care.
- The dose of mifepristone may be increased in patients who take antiepileptic drugs that augmen the hepatic p450 system that metabolizes mifepristone (i.e., phenytoin, phenobarbital, carbamazepine, and oxcarbazepine).
- If a seizure occurs during abortion in an awake patient, appropriate measures include maintaining patient safety (safe positioning with support) and interrupting the abortion procedure if possible until the seizure resolves.
- For post abortion contraception, consideration to the interaction of certain anticonvulsants wit combined hormonal contraception.

### Cardiac diseases-

- The incidence of cardiac disease in pregnant women ranges from 0.1-4%
- Induced abortions in these women require extra care as they are more prone to complications.
- In addition, certain drugs used frequently during the procedure may have side-effec detrimental to the cardiac status.
- Intravenous infusion of oxytocin at higher doses may result in fluid retention and pulmonar oedema due to its antidiuretic properties.
- Methylergometrine and prostaglandin F-2a have potent vasoconstrictive action and may lead to sudden severe hypertension.
- Joint care by the cardiologist, anaesthetist and gynaecologist in an institutional setting is likely to ameliorate the risk associated with induced abortion in these women.
- In women on anticoagulation due to a prosthetic valve, there is increased risk of haemorrhage during abortion.
- Discontinuing anticoagulants may lead to life threatening events like atrial fibrillation and thromboembolism. Mifepristone and misoprostol are not used commonly for elective abortion in women with cardiac disorders

### Asthma

- Women with a history of asthma without current symptoms may undergo usual care.
- Women with current well-controlled asthma should be encouraged to use usual medications and to bring an inhaler with them for their abortion visit.
- Prophylactic use of an inhaler with nebulized albuterol or metaproterenol before the procedure may be prudent.
- (PGF 2?) is not recommended, as it may cause broncho constriction.
- Misoprostol is not contraindicated.
- Mifepristone medication abortion should be avoided in poorly controlled asthmatics & who are on systemic glucocorticoid therapy.

- Hospital settings recommended for women with recent emergency room visits for asthma or intubation.
- Management may include premedication with steroids
- Liaison with pulmonary specialists.
- Local or regional anaesthesia may be preferable if severe, uncontrolled asthma is present.
- Post abortion contraception for asthmatic patients is unrestricted.
- Thyroid disease -
- Uncontrolled hyperthyroidism results in thyroid storm so treatment should begin promptly and the abortion should proceed after the disease is stabilized by medication.
- For advanced gestational ages, hospital care may be needed to manage a thyroid storm while performing an abortion expeditiously.
- Consultation with an anaesthesiologist is advisable if the patient is to receive deep sedation or general anaesthesia.
- Post abortion contraception for patients with thyroid disease is generally unrestricted.

### VonWillebrand disease (VWD)

- When replacement therapy is indicated for haemorrhage prophylaxis, surgical abortion is preferred because the onset and peak of bleeding is more predictable than during medication abortion.
- Moderate or severe disease women are best served by team of an obstetrician, haematologist and anaesthesiologist experienced in managing coagulation disorders.
- NSAIDs and oxytocin should be avoided with these patients.

### Anticoagulation & its Effect on management Induced abortions-

- Women with a high risk of thrombosis maintained on warfarin may be transitioned to heparin, 2 which can be held for surgery, and then warfarin may be restarted.
- This approach is time consuming and complex.
- Medication abortion is not recommended for women who are anticoagulated.
- For patients on antiplatelet therapies such as aspirin and clopidogrel, the risk of bleeding must be carefully weighed against the risk of coronary artery ischemic events.
- Low-dose aspirin therapy does not increase the severity of bleeding complications or perioperative mortality.
- Patients on combination antiplatelet therapy (clopidogrel and aspirin) face an increased risk of systemic bleeding.
- In general, the optimal period for discontinuation of antiplatelet therapy prior to any surgery is five days.
- Joint consultation with a cardiologist or neurologist is recommended.

#### **Conclusions-**

Effective post abortion care for women with such medical problems will reduce pregnancy-associated morbidity and mortality. Hospital-based abortion is recommended for women with medical conditions.

#### References

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2.Davis A, Easterling T. Medical evaluation and management. In: Paul M, Lichtenberg ES, Borgatta L, Grimes DA, Stubblefield P, & Creinin MD, editors. Management of unintended and abnormal pregnancy: Comprehensive

abortion care. Wiley-Blackwell, ed. Oxford: Blackwell Publishing Ltd; 2009, pp. 78-89.

# **20** MTP IN DIFFICULT CASES-(c) Nulliparous Woman

Medical termination of pregnancy in nulliparous is not unusual in regular clinical practice now a days. Almost 15 to 27 % MTPs are from to this category. Broadly the patients belongs to two groups. First group includes the nulliparous patients undergoing MTP unwillingly. Second group is opposite to them. The indications for the first group are missed abortions, blighted ovum, incomplete abortions, congenital anomalies and multi-fetal pregnancy in rare case. There is remarkable rise in the incidences and diagnosis of these conditions in early weeks if compared with

decades ago.

Girls below the age of 18 years can be the patients in this category, so the clinicians should be aware of POCSO act 2012 thouroghly.

Causes of increased bad outcome of pregnancies:

- 1) Increased age of marriage
- 2) Rise in the cases of PCOS and other medical disorders like GDM, HDP
- 3) Sedentary life styles
- 4) Increased environmental pollution.
- 5) Increased level of physical and mental stress.

6) Increased exposure to various communicable infections.

7) Increased use of ART

8) Early diagnosis of such conditions before spontaneous expulsion.

#### Causes of willing nulliparous MTP:

- 1) Early unplanned conceptions
- 2) Educational purpose
- 3) Job or economic reasons
- 4) Unmarried pregnancies
- 5) Pregnancies out of rape

#### **Physical examination:**

Usually the physical examination is same like the regular cases of MTP. Look for age, height, weight, systemic examination, abdominal examination and pelvic examination in through. Many medical disorders can be ruled out by proper physical examination like Anaemia, Asthma, Hypertension and many more.

Abdominal and Pelvic examination are important to confirm the age of gestation, to rule out ectopic pregnancy, and to know the condition of cervix and uterus.

#### **Investigations:**

Blood investigations like blood group with Rh factor, complete blood count, Urine albumin and sugar, Urine microscopy, blood sugar level, HIV, VDRL, HBsAg are must and if required we should go for liver function tests, renal function tests and cardiac assessment.

#### Role of USG :

USG is not compulsory by law but it is always useful for a clinician. One can diagnose the missed abortion or blighted ovum, ectopic pregnancy, Hydatidiform mole, multi-fetal pregnancy or accidental finding of vaginal, cervical or uterine anomaly. Also in some patients it becomes difficult to get the proper judgment of gestational age by physical examination because of uncooperative behavior or obesity. In such cases USG helps to assess the correct gestational age to decide the method of termination. Whenever possible TVS should be preferred over TAS. Methods: There are various methods depending upon the age of gestation.

### First trimester :

Medical method : Mifepristone & Misoprostol ( most preferredupto 9 weeks)

Methotrexate & Misoprostol Tamoxifene& Misoprostol

#### **Surgical Methods :**

Vacuum aspiration

suction evacuation & or curettage

#### dilation& evacuation

#### Second Trimester :

Prostaglandins- Misoprostole, Carboprost, Dinoprost Intracervical Foley's balooninflatation. Intrauterine instillation of hypertonic solutions

Oxytocin infusion

Hysterotomy

**Complications:** Proper cervical ripening or dilatation is the key to success in nulliparous cases. The cervix of nullipara, previously pregnant and previously vaginally delivered patient reacts differently to the drugs and the procedure. The cervix is made up of the circular and criss-cross smooth muscle fibres, which works efficiently in nullipara patient and try to retain the cervical closure till the end of pregnancy. This is the reason why cervical as well as uterine injuries are more in the MTP of nulliparous patient than the multiparous.

#### Methods of cervical dilatation : Rapid & Slow.

In rapid method, the cervix is gradually dilated under local cervical block or anaesthesia(General or Spinal) with the help of metal dilators starting from lowest possible. Maximum dilation is achieved up to 10 or 12 number, according to the gestational age and procedure to be carried out. There are chances of some complications in rapid dilatation. The immediate complications are injury to the cervix, perforation of posterior wall of cervix, perforation of uterus, Injury to the urinary bladder and rarely injury to the bowel. Sometimes it can lead tocontinuous hemorrhage also. The long term side effects can be re urrent urinary tract infections, cervical stenosis, Incompetency of cervix in next pregnancy. If the cervical injury is markedly gravious, then the situation may land up in secondary infertility

In slow method the cervix is ripened at least 6-8 hours prior the procedure of suction evacuation. Cervical ripening can be done physically by hygroscopic material like Laminaria tent placed intra cervical or the medicines like Misoprostole placed vaginally or rectally. This method has very less side effect. Sensitivity to the medicine or hygroscopic material used is the only risk factor. So unless contraindicated, the slow method of cervical dilatation should be preferred for the MTP in nulliparous patients to prevent the complications.

#### Take home message:

MTP is an integral part of clinical practice of most of the Obstetricians. Though this procedure is comparatively easy to perform than most of the other procedures in this subject, it has medico legal aspect. And the MTP in nulliparous patient has relatively more immediate & long term complications. If the procedure is not meticulous can be hazardous to the future fertility of that lady. So the preparation of cervix should be given more emphasis while performing MTP in every nullipara whatever is the indication. And the slow cervical ripening should be preferred.

# 21 Medicolegal Issues in Medical Termination of Pregnancy

People who are crazy enough to think they can change the world, are the ones who do-Rob Siltanen

#### The Law Relating to Abortion-

The Indian Penal Code, 1860(IPC), declares that causing a woman to abort is a crime and is punishable underS312-S316, with imprisonment from 2-7 yrsand fine. A protective Umbrella is hence provided by The MTP Act, 1971, if adhered to completely and offers complete protection to the medical practitioner from any of the consequences of the IPC.However legal protection is only available conditional to every requirement of the Act being fulfilled.

#### Legal framework of The MTP Act, 1971-ACT/RULES/REGULATIONS-

MTP Act - This lays down when & where pregnancies can be terminated. It also Grants the central govt. power to make rules and the state govt. power to frame regulations

MTP Rules(Framed by Central Government). These lay down who can terminate the pregnancy, training requirements, approval process for place, etc.

MTP Regulations(Framed by State Government). These lay down forms for opinion, maintenance of records, custody of forms and reporting of cases

Contravention of act or rules attracts 2-7 yrs imprisonment and fine and this offence is cognizable-arrest can occur without warrant and nonbailable- bail is not granted as a right.Contravention of regulations attracts Rs 1000/- fine (EXCEPT CONSENT)

#### Legal Abortions-

Abortions are termed legal only when all the following conditions are met: TERMINATION BY/FOR...

- A medical practitioner approved by the Act
- A place approved under the Act
- Conditions and within the gestation under the Act
- Other requirements of the rules & regulations are complied with

# Medicolegal Issues/grey areas and their solutions-

#### 1) Opinion formed in good faith -

**Section 3(2)-** Pregnancies may be terminated by registered medical practitioners where the length of pregnancy <12 weeks and where the length of pregnancy-13-20 weeks and opinionis given by two registered medical practitioners.

• Where to take this opinion? FORM I-Name/degrees/address/signature on the MTP REGISTER and OPD/ IPD PAPER- Wherever opinion is formed.

• Solution - The number of registered medical practitioners is relevant only to form the opinion-SIGNATURE. Once the opinion has been formed, the actual termination of pregnancy may be done by one registered medical practitioner. It is not necessary that more than one registered medical practitioner should act together to terminate a pregnancy.

#### 2)MTP on demand-

There is no question of MTP on demand even by the patient herself. MTP had to fit into one of the indications given in the act.

• What about article 21 of constitution providing the patient with right over her own body????? The MTP Act does not confer or recognize any right on any person to perform an abortion or termination of pregnancy. Even the pregnant woman cannot terminate the pregnancy except under the circumstances mentioned in the Act.

• Solution- Even during the 'first trimester', the woman cannot abort at her will and pleasure, There is no question of "abortion on demand". Sec.3 [18] is only an enabling provision to save the RMP from the purview of the IPC. The termination of pregnancy under the provision of the Act, is not the rule and it is only an exception( V Krishnan Vs G alias MadipuRajan and ors)

"Always USE THE INDICATIONS IN THE ACT and KNOW THEM CAREFULLY.

#### 3)MTP for maternal indication-

"RMP-Of opinion, formed in good faith, that,- the continuance of the pregnancy would involve risk to the life of the pregnant woman or of grave injury to her physical or mental health;

• What is this Risk to the life or grave injury??What constitutes such grave physical or mental injury is not given in the act and hence is a matter of speculation and debate.There are no CONDITIONS given in the act that serve as guidelines for decidingrisk to the life of the pregnant woman or of grave injury to her physical or mental health

• Solution- one should hence take a proper history, do a thorough examination, advice appropriate investigations and most importantly document all this before forming an opinion to use this indication.

### 4)MTP for fetal indication-

• That there is a substantial risk that if the child were born, it would suffer from such physical or mental abnormalities as to be seriously handicapped.

¡How to diagnose lethal fetal anamolies??Fetal anmolies are broadly of two types structural and genetic but more often both coexist.

• Solution - A list of fetal lethal anmolies is released by State family welfare Dept, Maharashtra in jan 2020..In order to diagnose fetal genetic abnormalities SERUM MARKERS and NTSCAN are not suffecient as these are screening tests. One needs to confirm the chromosomal defect by doing confirmatory tests like Amniocentesis ,Chorion villous sampling etc. Social and economic conditons of parents do not help for using the fetal indication if the anmolies are non lethal.QUALITY OF LIFE-malformed child does play a major role for deciding about MTP and

# 5) Failure of contraceptive method as an indication

• If pregnancy occurs as a result of failure of any device or method used ... for the purpose of limiting the number of children, the anguish caused by such unwanted pregnancy may be presumed to constitute grave injury to mental health.

• Whom is this indication available for-Available only for married. This discrepancy needs to be corrected .Fast changing Social Culture & Scientific developments have not been thought of.

• Solution-Indication for unmarried patient"In order to prevent grave injury to the physical or mental health of pregnant woman".

#### 6) Calculation of gestational age-

Age of viability of fetus is different in different countries and in India is taken as 28 weeks but upper limit of MTP remains 20 weeks.

• Aldo Medical methods in the form of drugs for abortion can be given upto 7 weeks.

• How to calculate GA ??? CALCULATION... LMP? CLINICAL EXAMINATION?USG?The act is silent. What if there is discrepancy in LMP and USG dating????

• Solution - Use LMP and clinical examination for patient with regular periods.USG is not mandatory before all MTPs but should be done for obese patient/ovarian cyst / uterine fibroid,PV bleeding-undiagnosed, previous H/O or suspected Ectopic pregnancy,pelvic mass, conceived in lactationalamenorrhoea,conceived after post OCP Amenorrhoea, LMP GA and clinical examination do not match, post MTP Pill on day 14 to confirm completeness of abortion etc.

¡READ USG CAREFULLY-BPD/FL/AC/HC ETC and AS MUCH AS POSSIBLE-AVOID DISCREPANCY and if present -BELIEVE THE GAWHICH IS MORE.\

#### 7)Consent and age related issues

• ADULT(>18yrs) - Self consent (Indian Majority act 1885) and person of sound mind.UNSOUND MIND OR MINOR-Guardian"s consent is needed

Legally Husband's consent is not necessary.

• How to acertain correct age and identity of the patient?? Ask for Birth certificate ?School Leaving Certificate ??X-Ray ???AADHAR CARD/Liscence????

• Solution- Clarify age and identity from the patient. RMP is not a fact finding agency. And neither is such proof warranted by law. But for abundant caution it is recommended to take Identity and age proof also AVOID UNRELATED GUARDIAN. Husband's signature may be taken for abundant caution and becomes necessary if anesthesia and surgical MTP IS planned.INFORM POLICE IF FOUL PLAY IS SUSPECTED

#### 8) Abortion pills- Mifepristone + Misoprostol

The GOI allows the use of medical agents to terminate a pregnancy up to 7 weeks gestation (49 days from LMP). DCI- allows upto9 weeks The MTP Act, 1971, allows MTP using Mifepristrone (RU 486) & Misoprostol approved for up to 7 weeks termination

• What is the procedure for procurement of pills and who can prescribe???Records?? Only an RMP (as defined by the MTPAct) can prescribe the drugs. One has to follow MTPAct, Rules & Regulations

• RMP can prescribe in his/her clinic, provided he/she has access to an approved place and should display a certificate from owner of approved place agreeing to provide access

• The term "RMP" used in this Act have different meanings at different placesSec. 2 (d) of act and Rule.4a,b,c,dIndian medical council act 1956 Sec. 2(h) In other words, a doctor, whose name has been entered in a State Medical Register and who has such experience or training in Gynaecology and Obstetrics as prescribed in Rule.4(a, b, c, d). emem

#### Solution -

All that applies to surgical abortions applies paripassu to Medical abortions. Only RMPs with certificate from registered center can prescribe/dispense pills.Purchase drugs from an authorized distributor and keep copy of purchase order .Maintain records of all drugs given to patient including batch no in a separate register & date of purchase Maintain records for 5 years and this includes misoprostol used for induction &PPH.Payment to be made by cheque at the time of arrival of stocks.Purchase in small quantities.We do not need a drug license to dispense drugs to our patients, we cannot sell drugs to other patients and ideally this is to be followed for all drugs

**9)Termination of Pregnancy with GA>20 weeks** Section 5 of The MTP Act, 1971 states that Pregnancy exceeding 20 weeks may be terminated even without the opinion of 2 registered medical practitioners where: a) the registered medical practitioner is of the opinion, formed in good faith, b) that the termination is immediately necessary to save the life of the pregnant woman.

• What is the procedure and criteria for such ?? State family welfare department, Maharashtra SFWD, Pune published on 18/1/2020 an SOP which enabled this to be done through a writ petition under Article 226 of Constitution of India, to High court.

• Solution- Medical boards areestablished in states. A WRIT PETITION IN HC which refers the matter to these Medical Boards. This is for survivors of Rape/late diagnosed anamolies. Medical boards then submit confidential report to HC which forms basis of decision by HC

• This SOP provides for METHODS of termination, documentation, list of fetal Anamolies in annexure-1 and all is completed within MAXIMUM 10 WORKING DAYS

#### 10) Rapid fire issues-

- Following are not MTPs-
- Missed abortions
- Blighted Ovum
- Incomplete abortions
- IUFD
- Vesicular moles
- Ectopic Pregnancy

**b) Police involvement-** Information to nearest police station incharge is mandatory if age of patient is <18yrs (THE POCSO ACT 2012).Take ac knowledgement from police.

if Rape is alleged without court's permission if you terminate the pregnancy it might amount to destroying the evidence.

#### c)Records -

• Admission register Form III-(signature of 2 RMPs if GA>12 WEEKS)

#### • C form

Form I, II (signature of 2 RMPs if GA>12 WEEKS)

• MTP report to be submitted in form II & Proformal

• Keep C form/FormI/II in an sealed envelope and lock- write secret document on it-custody with Owner All records maintained for 5yrs.

Monthly report to be sent to CMO on 30th , 31st or 1st of every month.

d)Confidentiality of information-

Name of the patient should only come in the MTP register and at all other places only her MTP no. Certificate for leave , if demanded can mention name of the patient and the onus to keep it confidential is with her employer.

Regulations imposing the restriction on the disclosure of the information contained in admission register to any person except:to the Chief Secretary to the Govt. in the case departmental or other enquiry,to a Magistrate of the First Class within the local limits of whose jurisdiction the approved place is situated, in the case of an investigation into an offence and to the District Judge within the local limits of whose jurisdiction the approved place is situated, in case of suit or other action for damages.

e) The MTP Amendment act 2020-not implemented as on today chief provisions-

Raised limit of MTP from 20 weeks to 24 weeks.

¡Opinion of one registered medical practitioner (RMP) for termination of pregnancy up to 20 weeks of gestation.

• **Opinion of two RMPs** for termination of pregnancy of **20 to 24 weeks**.

ifrom 20 to 24 weeks for survivors of rape, victims of incest and other vulnerable women.

• AND NO LIMIT IF THE MEDICAL BOARD ACCEPTS ANAMOLIES

• For unmarried women, the Bill seeks to **relax the contraceptive-failure** condition for "any woman or her partner"

<u>**Conclusions-</u>** The MTP Act if adhered to completely offers complete protection to the medical practitioner from any of the consequences of the IPC.However this legal protection is only available conditional to every requirement of the Act being fulfilled.</u>

We need to work towards getting such grey areas converted to clear white areasand till this is achieved we should follow all that we discussed-TCA-Totally, Completely and Absolutely.

**Prof. BHARTI MAHESHWARI** 

# The Overlap Between Abortion and Sex Selection-

From a gender equality perspective, sex selection is a reflection of discrimination against girls and subordination of women as a group. Not providing women access to safe abortion services despite legally valid reasons deepens this subordination. It is important to note that many women seek abortion services for reasons that are legally valid. However, access to safe services is an area of big concern. It is estimated that of the 64 lakh abortions performed in India every year, 36 lakh (56%) are unsafe. In fact, about eight percent of maternal mortality in India still occurs due to unsafe abortions. Abortion complications are the third major cause of maternal death, after haemorrhage and sepsis.

Hence it is important to address this issue, which is beautifully done by National Health Mission-Govt of india in Ensuring Access to safe Abortion and Addressing Gender Biased Sex Selection.

FOGSI MTP Committee disseminataed this informations among almost all FOGSI societies,leaders and members by launching project -surakshitgarbhpatbetibachaokesath-safe abortion services should not be jeopardized in preventing sex selection; important points and glimpses are shared in this chapter with hope access to safe and legal abortion to all women and no mortality due to unsafe abortion National policy is to make abortion safe and widely available as per the law: Abortion is legal for a number of reasons but not for reasons of selecting the sex of the foetus. Even today, eight percent of maternal mortality is due to unsafe abortions.

Safe abortion should not be jeopardised in preventing sex selection: Estimates indicate that about nine percent of abortions are sex selective and therefore ninety percent are not.

Do not discourage service providers from providing safe and legal abortion, through measures such as tracking of abortionoutcomes or reviewing data for second trimester abortions. Quite obviously, half of the legal abortions will involve female foetuses and this will be true regardless of the sex ratio of that area or the level of compliance with the law

Promote use of data related to sex ratio at birth and emphasise it as a more accurate indicator of the extent of sex selection. When using child sex ratio, be aware that this ratio also includes post birth factors that might skew the ratio, such as underreporting, infanticide, selective neglect and resultant female mortality. This underscores the need to also work on some of these post birth contributors to an imbalance in child sex ratio.

Do not imply that all women who previously have daughters are opting for an abortion for sex selection. Several studies have shown that education of the woman and unintended pregnancy are variables more closely correlated with opting for abortion as opposed to sex of the previous child. Do not use population sex ratio (number of females to 1,000 males in total population) to point to the problem of sex selection

Make sure that 'all' abortion is not understood as illegal.

Abortion for reasons of sex selection definitely needs to be prevented, and its illegality should be emphasized

Do not make use of terms such as 'female foeticide' or kanyabhrunhatya: these terms stigmatise abortion and imply it is not to be provided, endangering women who seek abortion for legal reasons

Do not use images of foetuses being crushed, stabbed and strangled, daggers going through the stomach of a pregnant woman, blood being splattered. Use images that express joy and celebration linked to the birth of a girl child.

Do not use images of a female foetus speaking from the womb: This tends to ascribe life to the foetus and furthers the perception of 'life being murdered'. This seriously jeopardises legal abortion.

} Do not use imagery that selectively emphasises on the value of women only as brides (like many men waiting to marry one woman): This further reinforces their devaluation in perceiving them as valuable only in their roles as brides. This takes the attention away from value of daughters in the family.

What is required is effective implementation of the laws governing the two distinct practices of sex selection and abortion. It is important to remember the distinct intents with which these laws were put in place - to ensure safe abortion (MTP Act) and to prevent misuse of technology (PC&PNDT Act).

#### WHO-GENEVA

REGARDING SAFE ABORTION-Respect for women's informed and voluntary decision-making, autonomy, confidentiality and privacy, with attention to adolescents and women with special needs

Glimpses of FOGSI MTP Committee: (2018-2020)



WSHOP And certificate in safe abortion wshop—24,5,19, medical college MZN-FACULTY DR BHARTI MAHESHWARI-30 delegates















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Available on FOGSI website, compressed pdf, easy to





ACTIVE PARTICIPATION IN WHO MEETING ON COMPREHENSIVE ABORTION CARE AT DELHI -24-26 NOV 2019----REPRESENTED FOGSI



ACTIVE PARTICIPATION IN WHO MEETING ON COMPREHENSIVE ABORTION CARE AT DELHI -26NOV 2019-----REPRESENTED FOGSI







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#### FOGSI MTP COMMITTEE-PUBLICATIONS IN 2020-21

1.FOGSI FOCUS ON MTP

2. MEDICAL METHOD OF ABORTION IN 1" TRIMESDTER

MTP COMMITTEE BULLETIN ON-





MEERUT-17.7, 19MTP COMM ACTIVITY





भेरत। अणित व गायनिक सोसापटी हारा बुधावार को गढ़ रोड स्थित एक होटल में कार्यसाला का आगोजन किया गया। इसका विषय का, जानिए हाउटान में कार्यवाता का आपवान करने पंच दुसरका तपच था, जानन गर्भपात का कानून, करवाई महित्साओं की जान। कार्यवाला में फरीनवें एमटोटी कांग्रेटी की पंचानसंग डॉ. भारती कार्यवाली ने कारण कि 60 प्रतिशा महित्याओं को गर्भरात के कानून की जानकारी नहीं है। जिसोप गरिश्वित्यों में ही यह कारण जा सकता है। जैसो-गर्भर कोमटी में परिकार नियोजन का तरीका फेल होने पर आदि। प्रथास तीना चाहिए कि गर्भपात की जरूरत न पहुं। यहां दी, पीटेल, झे, ऊपा हार्म, दी, मंजूल, डॉ. फ्रियेका, डॉ. अंजू रस्तोणी, डॉ. रफमा, डॉ. कॉर्डेने आदि मौजूद खों।

MTP COMM CHAIRPERSON -

9927856780

bhartinalok123@gmail.com

2018-2020







- - 3. IMPROVE CLINICAL SKILL
  - 4. COMMUNICATION SKILL
  - 5. FOLLOW UP

ACTIVE PARTICIPATION IN WHO WORKSHOP ON VALUE CLARIFICATION AND ATTITUDE INFORMATION TO STRENGTH EN CAC ON 15-17 OCT 2019-DR BHARTI MAHESHWARI-MTP COMMITTEECP







ACTIVE PARTICIPATION IN WHO MEETING ON COMPREHENSIVE ABORTION CARE AT DELHI -24 26 NOV 2019-----REPRESENTI FOGSI



#### DISSEMINATION OF KNOWLEDGE- 2019 -MTP COMMITTEE POSTERS,MES

















2019-conference on safe abortion

POSTER COMPETITION ON SAFE ABORTION-SAVING LIFE -WESTERN UP -7.7.19 BY MTP Comm-cp-prof bharti maheshwari----president-dr nandita paaalshetkar







2018- MTP COMM ACTIVITIES ALL OVER COUNTRY





2018-MTP COMMITTEE CME



#### 'महिलाओं में जागरूकता की कमी'

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PUBLICATIONS-by MTP Committee in january 2020-MCM





















#### FOGSI MTP COMMITTEE 2020

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FOGSI PRESIDENT2020



SECRETARY GENERAL







DR ATUL GANATRA DR BHARTI MAHESHWARI MTP COMM CHAIRPERSON VICE PRESIDENT

DR MANDAKINI MEGA ICOG CHAIRPERSON

### SURAKSHIT NARITVA-1ST MARCH



ORGANISED SURAKSHIT NARITVA-NATIONAL CONFERENCE AS ORGANIZINGSEC-1st AND 2ND MARCH-2020-SAFE ABORTION AND REPD AND SEXUAL HEALTH

#### FOGSIMTP COMM-CP\_PROF BHARTI\_MAHESHWARLPRESIDENT-DR NANDITA PALSHETKAR



YAVATMAL -CME BY MTP COMMITTEE-CP DR BHARTI MAHESHWARI 2019



#### FOGSE MTP COMMITTEE CME On -SAFE AND LEGAL ABORTION IN CLINICAL PRACTICE Punjab & Odisha ila, Nabha, Rourkela, Berhampur 6-08-2020 01 ICOG Ludhiana, Patiala, CREDIT HRS Nabeshwart & HOD MMCH to FOGSI MTP Committee cth 0 MIP ACT & ANY ROMENT BASE FEED COMMUTTLE FOR SAVE AN EASTY NEC ADDIS, SEC FORM KNTSUDNUS AT PATIALA OG ON EDUTATION BANKD CHOROSODIN ON CENTICAL AND LEGAL DODLES OF ADDITION MODERATOR FROM DIS MILANT BANKSTIMARI, PARLET DIS KINDARD, DIS AND ACT, DIS VERIS BARSH, DIS A S SAMAL

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Panel on safe abortion at international conference on saving mother-saifog -gorakhpur-3.8.19



GKP-SAIFCON-PANEL ON SAFE ABORTION-IN INTERNATIONAL CONFERENCE ON SAVING MOTHER





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9.6.2020=AJMER, ALWAR, KOTA, HANUMATGARHI, BHARATPUR MTP COMMITTEE WSHOP









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Following committees worked as affilated committees in cme on comprehensive abortion care in 7 cmes



Accademic-

Eb-Gyn Updatte

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 Public awareness
Family welfare
Food and drug committee
Adolescent committee



SESSION ON SAFE ABORTION-TALK ON 2<sup>ND</sup> TRIMESTER TERMINATION AICOG-2020





ORGANISED SURAKSHIT NARITVA-NATIONAL CONFERENCE AS ORGANIZINGSEC-1<sup>ST</sup> AND 2<sup>MD</sup> MARCH-2020-SAFE ABORTION AND REPD AND SEXUAL HEALTH





ORGANISEDSURAKSHIT NARITVA-NATIONAL CONFERENCE AS ORGANIZING SEC-1<sup>17</sup> AND 2<sup>ND</sup> MARCH-2020-SAFE ABORTION AND REPDAND SEXUAL HEALTH



PARTICIPATING IN FOGSI NATIONAL WEBINAR-2020-ON ABORTION WITH FOGSI,GOI AND IPAS -21 MAY

Activities by MTP Committee activities –since january2020 dr Bharti Maheshwari 26 APRIL, 6 MAY, 7 MAY

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social

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DR JAIDEEP TANK SECRETIARY GENERAL



SAFE AND LEGAL ABORTION-VOL 1 AN UPDATE ON DOCUMENTATION

EDITOR-













# **Medical Termination of Pregnancy (MTP)**

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For hard copy of FOGSI FOCUS or MTP bulletin on counseling, Documentation, medical method, MTP act amendment Please write to Dr. bharti maheshwaribhartinalok123@gmail.com or WhatsApp ():9927856780

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