

Acanthosis

FOGSI Endocrinology Committee Algorithm for Clinical Evaluation & Management of Adult Female Acne



FOGSI Office Bearers: Dr. Hrishikesh Pai, Dr. Madhuri Patel, Dr. Geetendra Sharma **Contributors:** Dr. Rakhi Singh, Dr Chandrika Anand, Dr. Parag Biniwale, Dr. Basab Mukherjee, Dr. Suvarna Khadilkar, Dr. Chaitanya Ganpule, Dr. Anshu Raina

Acne, also termed Acne Vulgaris, is a disease involving the pilosebaceous unit that presents with noninflammatory lesions (open and closed comedones), inflammatory lesions (papules, pustules and nodules), and varying degrees of scarring.

Acne is associated with a broad range of potential harms including symptomatic discomfort, scarring, emotional stress, psychosocial distress, occupational impact and potential psychiatric interference such as depression and suicide.

Adult female with acne

Assess Acne Severity

		*Indian Acne Association grading(IAA)		
History and Clinical Evaluation	*Medications causing Acne	Acne Severity Assessment		
1. History Onset & duration	1. Corticosteroids 2. Lithium	Acne grade	Description	
Irregular menstruation Hirsutism, hair loss on scalp, oily skin Any treatment taken for Acne Any medications that can cause Acne*	3. Vitamin B12 4. Thyroid hormones, 5. Halogen compounds (lodine, Bromine, Fluorine, Chlorine)	Mild	Open and close comedones with few inflammatory papules and pustules	
		Moderate	Papules and pustules predominantly on face	
Clinical Evaluation Severity of Acne (IAA Grading) Hirsutism	6. Antibiotics (Tetracycline, Streptomycin)	Moderately severe	Many papules and pustules, and inflamed nodules on chest and back	
Seborrhea	7. Anti-tubercular drugs 8. Antiepileptic Drugs	Severe	Several large painful pustules and nodules	

Serum androgen levels: Total testosterone, free testosterone, serum DHEAS. Ultrasound Pelvis for PCOM (Polycystic Ovarian Morphology);

Thyroid profile, Serum Prolactin (for PCOS patients only).

No PCOM on USG. Normal androgen levels.

Clinical or biochemical androgen excess and/or PCOM on USG.

- 1. Counsel the patient for dietary modifications: Include low glycemic index, low saturated fat, high whole grains, fruits and vegetables
- 2. Discuss treatment options and side effects
- 3. Whether planning for pregnancy?
 - 1. General & cosmetic skin care for all patients
 - 2. Topical therapy
 - 3. Oral antibiotic / oral isotretinoin (Avoid pregnancy)
 - 4. Combined oral contraceptives* for moderate, moderately severe and severe acne

(Refer to Table 1)

- 1. General & cosmetic skin care for all patients
- 2. Topical therapy
- 3. Combined oral contraceptives* in all patients for 3-6 cycles
 Ethinyl Estradiol 35/30 mcg or 20 mcg in combination with either of
 the Drospirenone or Cyproterone Acetate or Dienogest

(Refer to Table 1)

4. If no improvement with 3-6 cycles of treatment & in consultation with dermatologist & endocrinologist: Add Spironolactone 50-100 mg/day OR Cyproterone Acetate 100 mg (avoid pregnancy)

Table 1: Severity based treatment modality				
General advice for skin care	Gentle soap-free pH balanced cleanser or Benzoyl Peroxide cleanser or acne specific cleanser and/or sunscreen			
Procedures in Acne Management	Chemical Peels, Laser, Micro needling, Platelet Rich Plasma (Refer to a Dermatologist)			
Mild	Combined topical therapy only (Any 2 of 3) • Benzyl Peroxide 2.5% to 10 % and/or • Topical Adapalene 0.1% and/or • Topical antibiotic 2 % Erythromycin / 1% Clindamycin			
Moderate	Combination of topical & systemic oral therapy • Benzyl Peroxide 2.5% to 10 % and/or topical Adapalene 0.1% • Oral Doxycycline 50-100 mg daily or oral Azithromycin 500 mg once daily for 3 days per week or in cycles of 10 days for 12 weeks • Oral Isotretinoin 0.5 mg/kg for 4 weeks followed by 1mg/kg (Avoid pregnancy) • Combined oral contraceptives* (as below)			
Moderately severe or severe (Refer to a Dermatologist)	Combination of topical & systemic oral therapy Oral Isotretinoin 0.5 mg/kg for 4 weeks followed by 1mg/kg (Avoid pregnancy) Oral Doxycycline 50-100 mg daily or oral Azithromycin 500 mg once daily for 3 days per week or in cycles of 10 days for 12 weeks Combined oral contraceptives*Ethinyl Estradiol 35/30 mcg or 20 mcg in combination with either of the following progestins Drospirenone, Cyproterone Acetate or Dienogest in a 21/7 regimen (20 mcg EE/DRSP in 24/4 regimen)			

^{*} Rule out contraindications to COCs #Acne may be outside the health authority approved indication for oral combined estrogen progestin combinations in India

This algorithm poster is for informational purpose only and by no means obligates or influences any medical practitioners to prescribe, recommend or purchase any products from Bayer Zydus Pharma Private Limited (Bayer) or any of its affiliates. Please read full prescribing information before issuing prescription for the product mentioned in this poster. The information contained herein should not be utilized to diagnose or treat a health problem or disease without referring to the full prescribing information for the product referenced. Although great care has been taken in compiling the information, Bayer Zydus Pharma Private Limited shall not be responsible/ liable in any way for the present and/or continued accuracy of the information or for any errors, omissions or inaccuracies in this publications whether arising from negligence or otherwise howsoever, or for any consequences arising therefrom. Strictly for the use of registered medical practitioner or hospital or laboratory only.

References: 1. Kandhari S et al. Int J Res Med Sci. 2022 Apr; 10(4):980-990; 2. Oon HH, Wong SN, Aw DCW, Cheong WK, Goh CL, Tan HH. Acne Management Guidelines by the Dermatological Society of Singapore. J Clin Aesthet Dermatol. 2019 Jul; 12(7):34-50. Epub 2019 Jul 1. PMID: 31531161; PMCID: PMC6715335.; 3. Bagatin E, Freitas THP, Rivitti-Machado MCR, Ribeiro BM, Nunes S, et al. Adult female acne: a guide to clinical practice. An Bras Dermatol. 2019 Jan-Feb; 94(1):62-75. doi: 10.1590/abd1806-4841.20198203. Erratum in: An Bras Dermatol. 2019 Mar-Apr; 94(2):255. Machado MCR [corrected to Rivitti-Machado MC]. PMID: 30726466; PMCID: PMC6360964. 4. Zaenglein AL, Pathy AL, Schlosser BJ, Alikhan A, Baldwin HE, Berson DS, et al. Guidelines of care for the management of acne vulgaris. J Am Acad Dermatol. 2019 Jun; 82(6):1576. PMID: 26897386.

