

PHARMACOLOGICAL TREATMENT OF ACNE VULGARIS

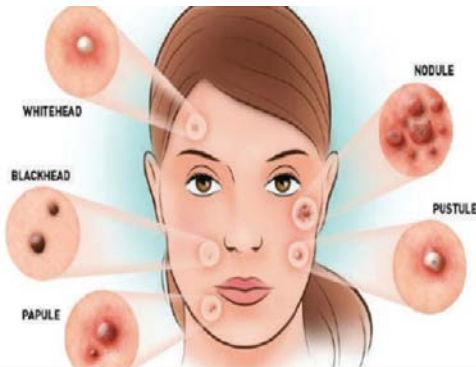


Figure adapted from Topical Preparations Counselling guide for Pharmacist 1st Edition : 2018

Treatment of acne vulgaris is based on the grade and severity of acne. ^[1]

TREATMENT GOALS ^[1]

- Resolution of lesions
- Reduction of psychological morbidity
- Prevention of scars

I) TOPICAL TREATMENTS

DRUGS	RECOMMENDED DOSE & DURATION ^[1]	CONTRAINDICATIONS ^[1]	AVAILABILITY IN HUSM ^[3]
Benzoyl peroxide (BPO) (2.5 - 10%) ^[1]	Apply once to twice daily	<ul style="list-style-type: none"> • Hypersensitivity to BPO 	Benzoyl peroxide gel 2.5% & 5%
Tretinoin (0.025 - 0.05%) ^[1]	Apply once at night or before bedtime	<ul style="list-style-type: none"> • Hypersensitivity to tretinoin • Eczema • Broken or sunburned skin • Personal or family history of cutaneous epithelioma • Pregnancy 	Tretinoin cream 0.05%
Sulphur & its combinations (1 - 8%) ^[1]	Apply once to twice daily	<ul style="list-style-type: none"> • Hypersensitivity to sulphur • Infant <2 months 	Sulphur In Aqueous Cream 6%
Cetrimide solution (1%, 2%) ^[2]	Apply solution twice daily Cetrimide mix with water on palms, Rub hand together until froth. Apply froth on face. Then rinse off.	<ul style="list-style-type: none"> • Hypersensitivity to cetrimide 	Cetrimide solution 2%
Salicylic acid (0.5% - 10%) ^[3, 4]	Apply twice to thrice daily	<ul style="list-style-type: none"> • Hypersensitivity to salicylic acid 	Salicylic acid in aqueous cream 2%, 5%, 6%, 10%

II) SYSTEMIC TREATMENTS (commonly used)

Limiting the duration of antibiotic therapy and adequate patient education to enhance compliance are paramount to reduce the risk of resistance while achieving a satisfactory outcome.



Figure adapted from <https://www.freepik.com/vectors/acne-treatment>

DRUG ^[1]	RECOMMENDED DOSE & DURATION ^[1]	CONTRAINDICATIONS ^[1]	AVAILABILITY IN HUMS ^[3]
Doxycycline	100 - 200 mg daily in 1 - 2 divided doses for 3 - 4 months	<ul style="list-style-type: none"> ▪ Hypersensitivity to tetracyclines ▪ Children ≤8 years old ▪ Pregnancy ▪ Lactation 	Doxycycline 100mg/ capsule
Erythromycin	Erythromycin Ethyl Succinate (EES): 400 - 800 mg twice daily for 3 - 4 months	<ul style="list-style-type: none"> ▪ Hypersensitivity to erythromycin ▪ Prolonged QT interval ▪ Uncorrected hypokalemia or hypomagnesaemia ▪ Clinically significant bradycardia 	Erythromycin Ethyl Succinate 400mg/ tablet
Isotretinoin	0.1 - 1 mg/kg/day Suggested starting dose of 10 - 20 mg/day. Treatment should be given until acne clearance and continued for another 4 - 8 weeks (estimated duration up to 6 months)	<ul style="list-style-type: none"> • Hypersensitivity to isotretinoin or any of its components • Hypervitaminosis A • Hyperlipidaemia or excessively elevated blood lipid values • Hepatic impairment • Pregnancy • Lactation • Concomitant use with tetracyclines and vitamin A (including dietary supplements) <p>*Avoid blood donation during treatment and within one month after treatment cessation.</p> <p>*Teratogenic – strict contraceptive practice is required for females who may become pregnant.</p>	Non standard

References

1. CPG Management of Acne Vulgaris (2nd edition)
2. Topical Preparations Counselling Guide for Pharmacist 1st Edition : 2018
3. Hospital USM Drug Formulary
4. Arif, T. (2015). Salicylic acid as a peeling agent: a comprehensive review. *Clinical, Cosmetic and Investigational Dermatology*, 455. <https://doi.org/10.2147/ccid.s84765>

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