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Department of Health Research
Ministry of Health and Family Welfare, Government of India

INDIAN COUNCIL OF MEDICAL RESEARCH
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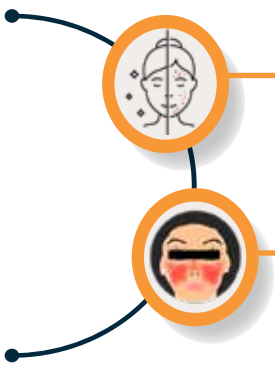
Standard Treatment Workflow (STW)

ACNE AND ROSACEA

ICD-10-L70-71



Acne is a common dermatosis of adolescence and often persists into adulthood

Rosacea often mimics acne but has distinct management issues

WHEN TO SUSPECT?

ACNE

- Comedones (open-blackheads, closed-whiteheads) ± any one or more of the following
  - Papules, pustules
  - Painful nodules containing pus
  - Cysts
  - Scarring
- Sites: Face and/or trunk
- Symptoms: None/pain/pricking

ROSACEA

- Photosensitivity
- Persistent erythema, telangiectasia ± papules and pustules in absence of comedones
- Sites: Convexities of the face (cheeks, forehead, nose, chin)
- Bulbous enlargement of nose- rhinophyma
- Symptoms: Sensitivity to hot and spicy food, and emotional triggers

USEFUL INFORMATION

- Acne and rosacea can co-exist
- It is important to treat acne early so that scarring is minimal
- In Indian scenario, consider 'topical corticosteroid induced acne and rosacea'

ADDITIONAL INFORMATION FOR CLINICAL EVALUATION

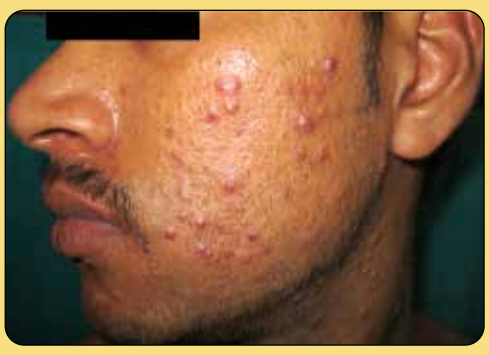
- History of cosmetics/topical steroid use- as such, or in combination with creams/fairness creams
- Age of onset usually around puberty; onset before 8 years of age requires hormonal evaluation
- History of recent drug intake (>fortnight/ month)- Drug induced acne
- History of contact with cutting oils/ halogens (ingestion of iodides/ bromides)
- History of menstrual irregularities (oligomenorrhea), weight gain and hirsutism- look for polycystic ovarian syndrome
- History of premenstrual flare
- Persistence or onset/ recurrence after 25 years of age
- History of dry and gritty eyes- requires ophthalmologic evaluation for ocular rosacea

ACNE VARIANTS AND DIFFERENTIALS

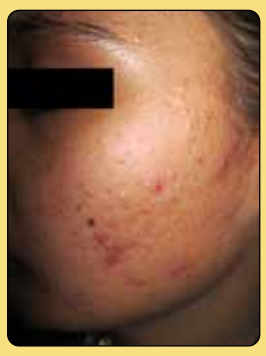
- **Acne conglobata:** Severe scarring on trunk and face with nodular lesions
- **Drug induced acne** (with corticosteroids/ antiepileptic drugs/ antitubercular drugs/ vitamin and protein supplements): Extensive, monomorphic papules and pustules in absence of comedones
- **Topical corticosteroid induced acne:** Hypertrichosis, shiny, thin skin, pigmentary changes with papulo-pustules
- **Hormonal acne:** Adult female with seborrhea, hirsutism, androgenetic alopecia, insulin resistance and PCOS, premenstrual flare, menstrual irregularities and prominent involvement of mandibular area
- **Occupational acne:** Predominantly comedones with history of exposure to cutting oil/ petroleum products
- **Acne excoriee:** Predominantly picked and excoriated lesions with prominent pigmentation
- **Acne fulminans:** Fever and bone pains in association with severe necrotic acne lesions
- **Hidradenitis suppurativa:** Association to consider when axillae/groins/ other flexures are involved with polyporous comedones/ pustules/ nodules/ abscesses/ scarring

DIFFERENTIALS OF ROSACEA

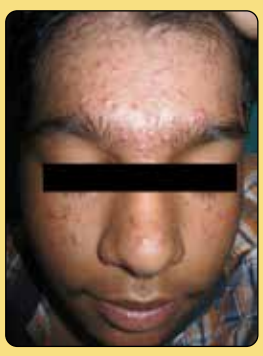
- **Connective tissue diseases like lupus erythematous or dermatomyositis:** Photosensitivity, presence of Raynaud's phenomenon, arthralgia, muscle weakness, dyspnea, dysphagia, oral/ genital ulcers, abdominal pain, frothy urine, seizures, or alopecia
- **Steroid induced rosacea:** Photosensitivity, hypertrichosis, atrophy and pigmentary changes, prior history of topical corticosteroid application for a long time
- **Seborrheic dermatitis:** Predominant involvement of nasolabial folds, eyebrows with erythema and greasy scales
- **Contact dermatitis or atopic dermatitis:** Significant itching, exudation and crusting



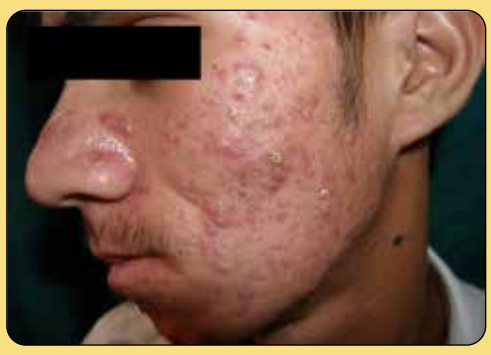
ACNE VULGARIS



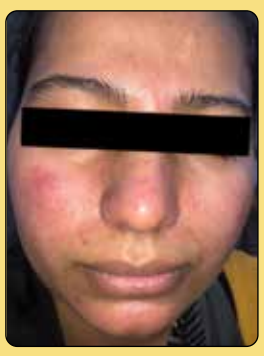
ACNE EXCORIEE



DRUG INDUCED ACNE



NODULOCYSTIC ACNE



ROSACEA

MANAGEMENT

ACNE

- Stop unsupervised topical corticosteroid and cosmetic use on face
- Clean face with soap/ mild cleanser
- Mild-moderate acne: 2.5% Benzoyl peroxide gel or 0.025% Tretinoin cream or 1% Adapalene gel ± Clindamycin gel for local application, at night time
- Moderate acne, not controlled with topicals: Cap Doxycycline 100mg OD for minimum of 4-6 weeks
- Severe nodulocystic acne: Isotretinoin treatment at tertiary level after documentation of normal lipid profile and liver functions
- Acne fulminans: start Prednisolone 0.5-1 mg/kg/day and refer to higher center
- Hormonal acne: Treatment with anti-androgens at tertiary level
- Drug induced acne: Stop offending drugs if feasible; treatment as per severtiy as detailed above

ROSACEA

- Avoid triggers (alcohol, caffeine, spicy food, cosmetics, topical steroids)
- Photoprotection
- **Mild papulopustular rosacea:** topical Azelaic acid (15%) or Metronidazole (1%) or Ivermectin (1%)
- Moderate disease, not controlled with topicals: Cap Doxycycline 100mg OD for minimum of 4-6 weeks
- Severe/phymatous/ ocular rosacea: refer to a specialist for low dose Isotretinoin/interventional treatment

TREAT ACNE EARLY TO PREVENT SCARRING