



Mild

Moderate

Moderate  
Severe

Severe

## TREATMENT BASED ON ACNE SEVERITY

- 1) topical retinoid +/- benzoyl peroxide
- 2) topical retinoid + benzoyl peroxide/topical antibiotic
- 3) topical retinoid + benzoyl peroxide/topical antibiotic + oral antibiotics
- 4) isotretinoin + medications from point 3

## BENZOYL PEROXIDE

- **MOA:** topical medication that acts via the generation of free radicals that oxidize proteins in the P. acnes cell wall
- **Adverse Effects:** bleaching of hair, colored fabric, or carpet; skin irritation
- **Examples:** prescription and over-the-counter creams, lotions, gels, and washes

## TOPICAL ANTIBIOTICS

- **MOA:** reduce the number of C. acnes and reduce inflammatory acne
- **Adverse Effects:** dryness, skin irritation (use with moisturizer), use on alternative days if also using retinoids or benzoyl peroxide, use with benzoyl peroxide to prevent antibiotic resistance
- **Examples:** erythromycin 2% (solution, gel); clindamycin 1% (lotion, solution, gel, foam)

## Hormonal Acne

- Characterized by flares with menstrual periods
- Typically distributed along chin and jawline
- Cystic

## Treatment

- 1) oral contraceptives
- 2) spironolactone

## TOPICAL RETINOIDS

- **MOA:** vitamin A derivatives that act by normalizing the desquamation of follicular epithelium
- **Adverse Effects:** dryness, pruritus, erythema, scaling, photosensitivity
- **Examples:** tretinoin, adapalene

## ORAL ISOTRETINOIN (ACUTANE)

- **MOA:** retinoic acid derivative
- **Adverse Effects:** dryness, cheilitis, elevated liver enzymes, hypertriglyceridemia; teratogenic, contraindicated with tetracycline antibiotic use

## ORAL ANTIBIOTICS

- **MOA:** reduce C. acnes colonization of the skin and follicles
- **Adverse Effects:** GI upset, photosensitivity, use with benzoyl peroxide to prevent antibiotic resistance
- **Examples:** tetracycline/doxycycline (first-line); macrolides (second-line)

**First-line treatment includes one or a combination of the above therapies depending on acne type and the staging of the acne as either mild, moderate, or severe.**

## REFERENCES

1. AAD Basic Dermatology Curriculum: Acne and Rosacea
2. Image from: Zo Skin Health

