GUIDELINES FOR MANAGEMENT OF ACNE

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TREATMENT OF ACNE

Classification of Acne

Severity	Papules/Pustules	Nodules
Comedonal	None to few	None
Mild	Few to several	None
Moderate	Several to many	Few to several
Severe	Numerous or extensive	Many

Medications available at ANMC for acne treatment

Topical

1. Bacteriocidal:
   - Benzoyl peroxide (OTC-non formulary) - antimicrobicidal gel, cream, lotion (2.5, 5, 10%). Apply qhs or bid. May irritate skin resulting in redness and scaling which usually resolves with continued use.
2. Topical antibiotics:
   - Clindamycin solution. Apply bid
   - Benzamycin gel* (Erythromycin 3%, Benzoyl peroxide 5%). Apply qhs initially, advance to bid if indicated

     * Benzamycin gel is second line (restricted per ANMC's formulary to failed topical clindamycin).
3. Retinoids:
   - Tretinoin (Retin-A) cream 0.025%, 0.1%. Start with lower strength, applied 2-3 times/wk. Wash skin before bedtime and allow to dry for 30 mins before applying tretinoin. Redness and scaling may occur and acne may worsen over 2-4 weeks. Benzoyl peroxide oxidizes tretinoin, so don't apply at the same time.

Systemic

1. Oral antibiotics. Start with high dose and gradually taper over 2-4 months to lowest maintenance dose required to maintain control. Instruct patients to increase dose with first sign of flare-up.

   - Tetracycline-250mg, 500mg. Start with 500mg bid, taper monthly to 250 mg bid, then qd or qod. Take on an empty stomach (avoid taking with dairy products, iron, or antacids). Contraindicated in pregnancy and in children before permanent teeth are in place. Warn patients that drug may decrease effectiveness of oral contraceptive pills.

   - Doxycycline-Start 100mg bid. Patients may experience higher incidence of photosensitivity.

   - Erythromycin- 250mg, 500mg. Start 250mg qid, taper monthly or sooner to tid, bid and Qd. Causes GI irritation.

   - Trimethoprim/sulfamethoxazole - SS or DS qd – bid. Effective, but increased risk of serious side effects is not known to increase with prolonged use.

2. Hormone related therapy
   - Estrogen in combination with a progestin agent with low androgenicity [i.e. ethynodiol diacetate (Demulen-non formulary), norgestimate (Ortho Tri-Cyclen-non formulary), and desogestrel (Desogen/Apri)].
   - Oral prednisone 5 mg/day should be administered with caution due to potential side effects with long term use.

3. Isotretinoin (Accutane) see Isotretinoin guidelines

Adjunctive measures

1. Corticosteroid injection. Intralesional injection of triamcinolone acetonide (Kenalog) 1.0-2.5 mg/ml of solution will lead to rapid resolution of most cystic lesions in 2-3 days. Dilute solution with normal saline or 1% lidocaine. With 27-30 gauge needle inject 0.05-0.3 ml superficially into each cyst until slightly distended. Do not inject more than a total of 20mg. Repeat after 3 weeks if necessary.

2. Comedone extraction. The open or closed comedone is opened first with the tip of #11 scalpel blade or a 25-gauge needle. Local anesthesia is not required. Both open and closed comedones can be extracted manually by applying gentle pressure around the margins of the comedone with a comedone extractor, opening of an eye dropper, or paper clip bent into a small circle.

Acne Treatment by Severity or Type of Acne

1. Comedonal Acne (Obstructive, Non-inflammatory) Closed comedones (whiteheads) and open comedones (blackheads)

Topical agents
- Benzoyl peroxide (otc)
- Tretinoin (Retin-A)
- Consider alternating these agents one in the morning and one at night

2. Mild Papulopustular Acne (Mild Inflammatory Acne)

Topical agents
- Above agents plus
- Clindamycin solution
- Benzamycin (trial of clindamycin first)

Add oral antibiotics if topical agents not effective

3. Moderate Papulopustular Acne (Moderate Inflammatory Acne)

- Start with combination of topical antibiotic, benzoyl peroxide, and oral antibiotic
- Tretinoin (Retin-A)
- Consider birth control pills in women
- Consider Isotretinoin if adequate trial of other therapies over 9 months is not working

4. Severe Nodular or Nodulocystic or Scarring Acne

- Above therapies
- Isotretinoin
- Intralesional corticosteroid injection

5. Very Severe Acne

- Acne fulminans should be treated with oral steroids and oral antibiotics before isotretinoin. Acne fulminans may be precipitated by isotretinoin, so it helps to treat the acute inflammation and infection first.

Patient Education

1. Acne is a chronic skin disorder that is likely to wax and wane

2. Isotrentinoin does not cure acne but puts it in long-term remission. Long term therapy may be required even if the skin clears

3. Topical therapy should be applied to all affected areas, not just to individual lesions.

4. Significant improvement may not be apparent for 3-6 weeks after the initiation of therapy.

5. Obsessive scrubbing may exacerbate the condition. Wash affected areas gently with mild non-moisturizing soap (Neutrogena, Clearasil) and pat dry.

6. Picking and popping pimples serves only to increase inflammation and the likelihood of scarring.

7. There is not relationship between acne and masturbation, sexual activity, or venereal disease.

8. Oil based cosmetics, moisturizers and suntan lotions can be comedogenic and should be avoided.

9. There are no rigid dietary restrictions. Patients should eat a healthy diet and avoid those foods that consistently aggravate condition.

10. Many of the acne medications will increase sun sensitivity.