Adult Female Acne

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Disclosures

- Allergan
- Galderma
- Valeant
- Bayer
- Ferndale
- J & J
- Aclaris
- P & G
Trigger Factors

• Nonspecific trigger factors have been described
  • Internal factors
    • Hormones
    • Genetic background
    • Endocrinopathies: POC
  • External factors
    • Cosmetics
    • Stress
    • Smoking
    • Sun
    • Medications (eg, benzodiazepin)

Patient Factors to Consider when Treating Adult Female Acne

- Clinical aspects: lesions type
- Potential slow response to treatment
- Maintenance therapy
- Likelihood of high adherence
- Emotional/psychological impact
- Child-bearing potential
- Potential of older skin to irritation
- Cosmetic use
- Photoaging/damage
- Skin type
- Ethnicity
- Smoking

Management of Acne

- Skin care, cosmeceuticals, cosmetics
- Topical treatments
- Oral treatments
- Hormonal therapies
- Procedures
- Diet, lifestyle
- “New” Therapies
Cosmetics

- Mineral make up – fastest growing sector in cosmetics market
- Micronized powdered formulas of silica → deflect light →↓ appearance pores, fine lines
- Camouflage redness
- Titanium dioxide, zinc oxide – inorganic
- Dimethicone crosspolymer – lubricates
  - mattifying – smooth matte finish
  - talc microspheres absorb oil
- Noncomedogenic, hypoallergenic, less fragrance
- Green tint, brushes less abrasive than sponges
Cosmeceuticals

- Barrier
- Antiinflammatories, Antioxidants
- Exfoliation
- Pigment
- “Neutraceuticals”/ Dietary supplements
  - Zinc, nicotinamide, folic acid, copper
Topical Treatments

• Retinoids – first line, many formulations
  – photodamage, PIH

• Benzoyl peroxide – no resistance
  – inflammatory lesions

• Sulfone (Dapsone) – anti-inflammatory
  – vehicle

• Azelaic acid – antimicrobial
  – anti – tyrosinase (PIH)

• Antibiotics – fixed combinations
  – synergistic effects

• Sodim sulfacetamide, sulfur
Oral Treatments

- Antibiotics – anti-inflammatory
- Isotretinoin
- Hormonal therapies
Systemic Antibiotics – Antibiotic Stewardship

- Minocycline, doxycycline
- Limit 6 months
- Use with topical BP
- Avoid topical antibiotic monotherapy
- Other topicals for maintenance
Perimenstrual Flare of Adult Acne

- 65% reported worsening with menses
- 56% in week preceding menses

The addition of spironolactone to topical retinoid treatment suggests a superior response to retinoids alone in clearance of female adult cyclical acne.

Ref: Spironolactone and Topical Retinoids in Adult Female Cyclical Acne. 
Hormonal Flares

• OCP’s decrease free testosterone
  – ↓ ovarian production
  – ↑ SHBG

• Newer forms – continuous, patches, rings, IUD

• Spironolactone – antiandrogen – blocks androgen receptor

• Decrease sebum production
Continuous contraceptive therapy

• Yaz
• Loestrin 24
• Seasonale Lo
  • EE + levonorgestrel
    (84 + 7 days)
• Lybrel
  • no interval (84 days continuous)
Newer Contraceptives

• Patch (Ortho Evra\textsuperscript{R})
  – EE 20 mcg + norelgestromin
• Vaginal ring (NuvaRing\textsuperscript{R})
  – EE 15 mcg + etonogestrel
• Injectable (Lunelle\textsuperscript{R}) – estradiol cypionate + medroxyprogesterone acetate
• Levonogestrel – releasing IUD
• Implant (Implanon) – etonogestrel
  • arm – 3 years
Spironolactone

- Perimenstrual flares
- Treatment resistant acne in women
- Augment OCP for “hormonal” acne
- Hirsutism, androgenic alopecia
Spironolactone: Dosage and Duration of Treatment

• Dosage
  • Range: 25 mg/day to 200 mg/day
    • Most patients require 50 to 100 mg/day
    • Side effects higher with >100 mg/day
  • Start with a lower dose with step-wise increase as needed
    • May take 4 to 12 weeks for visible response to occur
  • Monotherapy or combine with other topical and oral agents

• Results of clinical trials
  • Effective and safe in treating acne vulgaris
    • 50 to 100 mg/day reduces sebum excretion 30% to 50%\(^2,3\)
    • Lesion reductions from 50% to 100% in women with acne treated with 100 to 200 mg/day
    • Response noted over approximately 3 months\(^4\)
    • Improvement in facial and truncal acne\(^5\)

Hormone Suppression Therapy in Women with a Family History of Breast Cancer

• Risk of developing breast cancer
  • Spironolactone\(^1\)
    • Recommendation to avoided spironolactone in women at increased risk for breast cancer or estrogen-related tumors (through personal or family history) stems from a report in rodents — no proven association in humans
    • Insufficient evidence to suggest spironolactone has a direct causal link to the development of breast cancer
    • Long-term use appears safe, overall
  • Oral contraceptives\(^2\)
    • WHO meta-analysis (1996)
      • 53,297 women with breast cancer vs. 100,239 controls
      • Risk of breast cancer in a user was 1.24 vs. women who never used an OC
      • Family history of breast cancer, dosage, OC formulation, and duration of use did not correlate with risk

Diet

- Low glycemic diet
- Mediterranean diet
- Dairy
  - skim milk
  - sheep milk
- Whey protein
- Probiotics
  - oral supplements
  - skin microbiome and innate immunity
  - ↓ inflammatory mediators
  - ↑ ceramides, restore barrier
The Seven Dwarves of Menopause

Itchy, Bitchy, Sweaty, Sleepy, Bloated, Forgetful & Psycho