

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

Dreno B, et al. *JEADV*. 2013;27:1063-1070.

Williams C, et al. *Am J Clin Dermatol*. 2006;7:281-290..

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

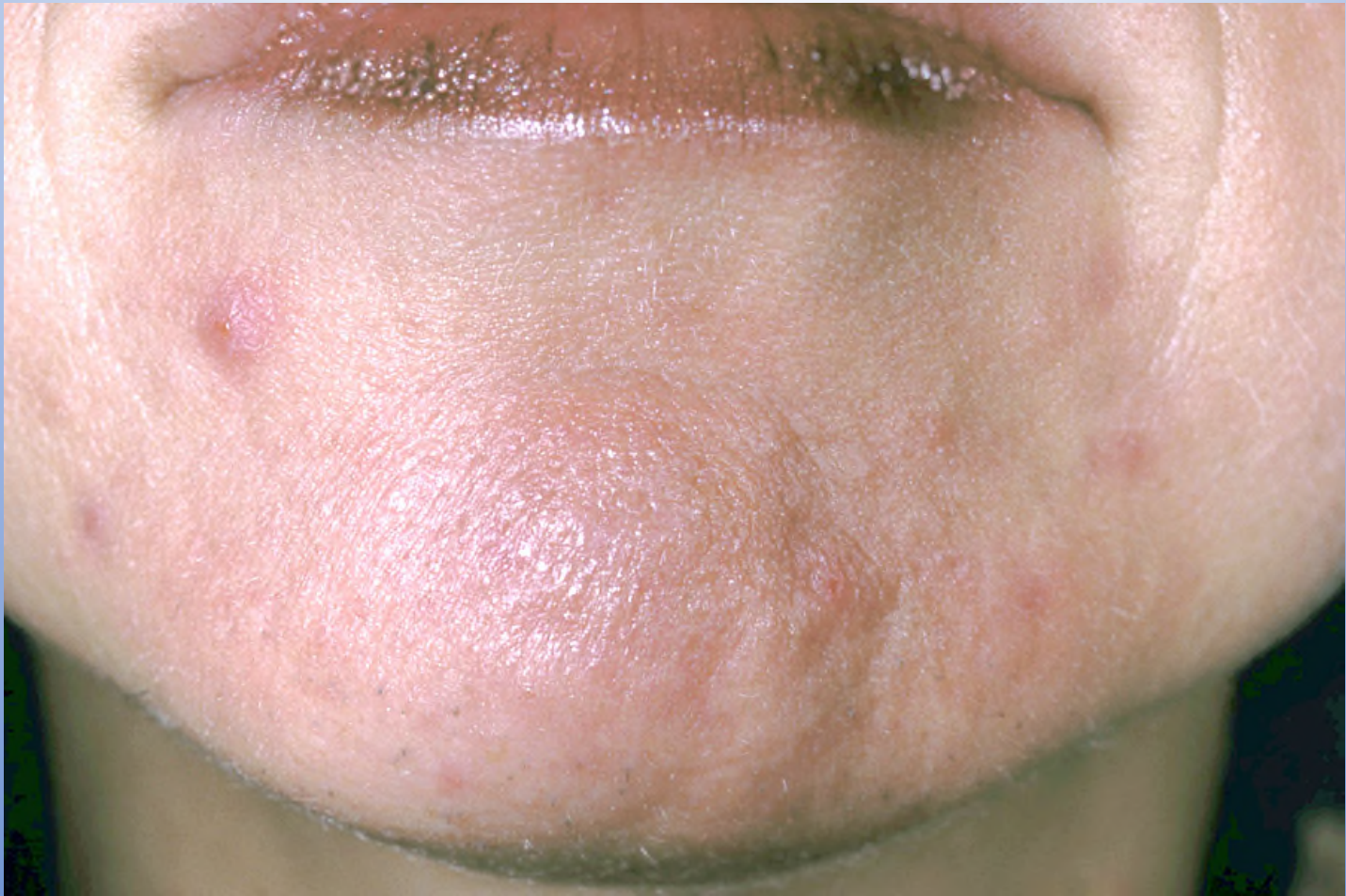
- Retinoids – first line, many formulations
 - photodamage, PIH
- Benzoyl peroxide – no resistance
 - inflammatory lesions
- Sulfone (Dapsone) – anti-inflammatory
 - vehicle
- Azelaic acid – antimicrobial
 - anti – tyrosinase (PIH)
- Antibiotics – fixed combinations
 - synergistic effects
- Sodim sulfacetamide, 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

Ref: Perimenstrual Flare of Adult Acne. *J Clin Aesthetic Dermatol.* 2014; 7(8): 30-34

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.
J Drugs Dermatol. 2014; 12(2): 126-129.

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^R)
 - – EE 20 mcg + norelgestromin
- Vaginal ring (NuvaRing^R)
 - – EE 15 mcg + etonogestrel
- Injectable (Lunelle^R) – estradiol cypionate + medroxyprogesterone acetate
- Levonogestrel – releasing IUD
- Implant (Implanon) – etonogestrel
 - arm – 3 years

Spirolonolactone

- 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 months⁴
 - Improvement in facial and truncal acne⁵

1. Kim GK, Del Rosso JQ. *J Clin Aesthet Dermatol*. 2012;5:37–50.

3. Akamatsu H, et al. *J Invest Dermatol*. 1993;100:660–2.

5. Goodfellow A, et al. *Br J Dermatol*. 1984;111:124–5.

2. Thiboutot D. *Clin Dermatol*. 2004;22:419–28.

4. Thiboutot D, Chen W. *Dermatology*. 2003;206:57–67.

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

- Risk of developing breast cancer
 - Spironolactone¹
 - Recommendation to avoid 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 contraceptives²
 - 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

1. Kim GK, Del Rosso JQ. *J Clin Aesthet Dermatol*. 2012;5:37–50.

2. Harper JC. *Semin Cutan Med Surg*. 2005 ;24:103–6.

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