ACNE IN THE POST ADOLESCENT FEMALE

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CONFLICTS OF INTEREST

Member of the following Advisory Boards:
- Medapharm
- Allergan

POST ADOLESCENT ACNE

- Is this a distinct entity?
- Who gets it?
- Clinical patterns
- Treatment options
- Who to investigate
- What investigations to do
- Treatment options in this group
- New treatments

POST ADOLESCENT FEMALE ACNE

- A distinct clinical entity
- Most common in females

Acne may be
1. PERSISTENT since adolescence
2. LATE ONSET acne
3. RECURRENT acne after adolescence

45% of women age 21 to 30 years
26% of women age 31 to 40 years
12% of women age 41 to 50 years

A chronic disease associated with low self-esteem, depression, scarring, dyschromia.
TRIGGERS IN POST ADOLESCENT FEMALE ACNE

Genetics
Hormones - androgens, progestogens
  - Intrinsic: Pathological states e.g. PCOS and rarely virilising tumours
  - Extrinsic: Dietary, medication, stress, smoking
Cosmetics
? Antibiotic resistant P. acnes

PATHOGENESIS OF ACNE

CLINICAL FEATURES
• Insidious onset
• Generally mild or moderate severity
• Often refractory to treatment
• Prone to relapse
• Need long term maintenance treatment
• Menstrual flares in 85%
• Greater impact on QOL

CLINICAL PATTERNS IN POST ADOLESCENT FEMALES
• Affected women often complain of large pores
• Inflammatory lesions are common on the jawline and neck (bottom heavy)
• Premenstrual flares are common
• Macrocomedones (large whiteheads) are more common

Treatment needs to target the different lesion types.

TREATMENT CONSIDERATIONS
• Predisposition of ageing skin to irritation
• Slow response to treatment and maintenance required
• Compliance with treatment usually good
• Women of child bearing age
• Psychological impact
TOPICAL TREATMENTS

• RETINOIDS
  - Comedolytic, keratolytic
  - Anti–inflammatory
  - Act on microcomedones
  - Adapalene, tretinoin
  - Photosensitivity, teratogenic

BENZOYL PEROXIDE

- P.acnes action
- Anti- inflammatory
- Mild comedolytic
- 2-10% cream, wash
- Irritation, bleaching

COMBINATION

- Retinoid + BPO
- Antibiotic+ BPO

TOPICAL TREATMENT

TOPICAL ANTIBIOTICS

- Anti- inflammatory
- Anti-microbial
- Clindamycin 1%
- NB Resistance – use in combination with BPO

TOPICAL TREATMENTS

• AZELAIC ACID
  - Mild comedolytic
  - Anti-inflammatory
  - Useful for pigmentation

  • Salicylic acid
  • Lactic acid
  • Sulphur

NEW TOPICAL TREATMENTS

• Epiduo Forte gel– adapalene 0.3%, BPO 2.5%

• Acnatac gel– clindamycin,tretinoin 0.025%

NEW TOPICAL TREATMENTS

ACZONE – Dapsone 7.5 % gel

- Once daily
- Non-irritating, well tolerated
- Non staining
- Active for inflammatory and comedonal lesions
- Pump pack
**ORAL ANTIBIOTICS IN ACNE**
If topical treatment is inadequate.
- Doxycycline, Minocycline, rarely erythromycin or sulpha drugs
- Oral and topical antibiotic use can promote bacterial resistance and should be avoided
- Monotherapy with antibiotics is not recommended
- Concomitant topical therapy with BPO or retinoid should be used

**WHO TO INVESTIGATE**
- Those with absent, irregular or infrequent periods
- Co-existent hirsutism
- Androgenetic alopecia
- Signs of insulin resistance - obesity, acanthosis nigricans, skin tags
- Metabolic syndrome

**PCOS DIAGNOSIS**
The most common endocrine disorder of reproductive age females.
Need 2 of the following:
- Amenorrhea or oligomenorrhea
- Clinical or biochemical hyperandrogenism
- Positive U/S findings of
  - increased follicle count
  - increased ovarian volume

**PCOS DIAGNOSIS**
- PCOS is a diagnosis of exclusion.
- Rule out other causes of hyperandrogenism and anovulation
  - congenital adrenal hyperplasia
  - Cushing syndrome
  - androgen secreting tumours

**PATHOGENESIS OF PCOS**
Interplay between
- Androgens
- Insulin
- LH
- Oestrogen
Leading to metabolic and reproductive sequelae

**WHAT INVESTIGATIONS TO DO**
- DHEAS
- TOTAL AND FREE TESTOSTERONE
- SHBG
- LH/FSH
- INSULIN
- PROLACTIN
- THYROID FUNCTION
- HbA1c
- LIPIDS
PCOS TREATMENT

Diet (weight loss)
Exercise
Metformin, statins
Stop smoking
Treatment of signs (hair, acne)

PCOS AND METABOLIC SYNDROME

The combination of obesity, hypertension, dyslipidemia and insulin resistance.

Results in a pro-inflammatory state.

2-10 x greater chance of CVS disease
5-30 x greater chance of developing Type 2 diabetes.

METABOLIC SYNDROME DIAGNOSIS

3 or more of the following

HIGH BSL
HIGH LDL
LOW HDL
HIGH BLOOD PRESSURE
ABDOMINAL OBESITY

HORMONAL TREATMENTS

- Combined oral contraceptive Pill
  - reduce androgen production from ovary
  - block androgen receptors
  - active on inflammatory and comedonal acne
  - contain cyproterone, drospirenone, gestodene,
- Spironolactone
  - blocks androgen receptors / 50 – 100 mgm daily
- Cyproterone acetate
  - blocks androgen receptors

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