

Pathogenesis:

- Excessive sebum.
- Then abnormal cell turnover at the exit to the sebum gland.
- Then get colonisation by C.acnes.
- Then inflammation and an immune response.

Acne

Disclaimer:
Read the disclaimer at medimaps.co.uk/disclaimer

References:

1. Dermatology lecture, GP Scholar, Oct 2016
2. Dermatology consultant Alliance Federation Walsall
3. Dermatology consultant, Pulse conference, June 2019
4. Dermatology consultant Spire webinar June 2020.
5. Dermatology consultant, Pulse conference, Oct 2020
6. Dr Tewari dermatology consultant King's College NHS, LEO webinar Jan 2021
7. <https://www.bmj.com/content/381/bmj-2022-074349>
8. <https://www.bmj.com/content/381/bmj.p1114>

Symptoms

- Note in dark skin shows as brown spots.
- Under the skin shows itself as black head.
- If raised can have white head.

Management

Tips on oral Abx use

- Give regular dose of lymecycline or doxycycline for 3-4/12 then review.
- If severe can double the dose of doxycycline.
- Avoid oral Abx and topical Abx together.
- Avoid erythromycin due to high resistance (unless pregnant).
- Avoid monotherapy oral Abx i.e. use with topical benzoylperoxide or retinoid.
- Do not use in pregnancy. Can use > 12y (due to bone and teeth s/e).

- IF EFFECTIVE:

- Can switch to topicals now skin is better.
- Some consultants state can continue long term if its working e.g. 6-12/12.

Other consultants advise limit to 3/12 and ideally no more than 2 cycles due to Abx resistance with longer courses.

- If doing well, do not change, as intestinal flora damage occurs from intermittent use of it i.e. on and off use. Whereas, if used daily then will only occur in first few months.
- Think. If repeatedly needing Abx (even if effective) then do they need a referral to dermatology for roaccutane.
- In the future give same Abx courses, rather than changing.

- IF FAILS:

- Switch to another Abx for a further 3/12. Perhaps macrolide or trimethoprim.
- If swapping Abx, give one course of benzyl peroxide for 1/52 before starting the new Abx, as it eliminates the Abx resistant bacteria.

OTC self care

- Tea tree oil has some evidence for mild acne.

Lots of inflammatory lesions or sensitive

- Duac 3%.

Comedones (white heads)

- Retinoids.
- Apply alternate nights to allow the skin to get used to it for a week or two, then every night. Can counteract with emollient.
- Epiduo, Adapalene.

Severe or scarring

- Oral Abx and topical, and also refer to dermatologist.
- Once they have worked by about 4/12, stop oral Abx and continue the topical.

- FBC.
- UEs.
- LFTs.
- Lipids.

- In case they start Roaccutane.

Darker skin type

- Skinoren (azelaic acid) as less likely to get hypopigmentation.
- Apply OD.

Widespread on back

- Oral Abx, as not practical to use topical all over.

Females

- Hormonally (androgen) driven.
- Causes ↑ size and secretion of sebaceous glands. Also keratinization.
- Often lower face and jawline.
- Affects 12% females >35y. Only 5% >45y.
- Typically flares up 1/52 before period.
- Topical retinoid and COC combination is good choice.
- COC ↑ SHBG ∴ ↓ circulating free testosterone.
- Dianette and Yasmin could be better for the skin.
- Need to use for 6 cycle to determine if helped or not.
- Or block androgen receptors using spironolactone.
- Progesterone can worsen acne.
- Metformin in PCOS can help acne.

- Initially 50mg OD. If tolerated ↑ to 100mg within 1-2/52.
- Can use for 1-4yrs.
- Maximum benefit takes 6/12 to be reached.
- Warn against getting pregnant due to antiandrogen effect.
- UEs before starting to ensure K ≤ 4.5.
- However, ongoing monitoring is unnecessary for most young women, but advocated only if >45y or with relevant comorbidities.

Diet

- There are studies that diet might play a part.
- Especially high glycaemic load, and skimmed milk.
- Prokinetics could be recommended.