North of Tyne and Gateshead Guidelines for the Management of Acne (from 12 years of age)

Assess acne severity
Consider underlying causes and acne inducing medication

Mild
Comedones, papules, pustules
Limited extent

Each agent to be used once daily for a minimum of 4-6 weeks. If tolerated, continue indefinitely or as long as needed.

1. Topical **benzoyl peroxide (BZPO)** or **azelaic acid 20%**
2. Topical **retinoid** (contraindicated in pregnancy)
3. Topical **combination BZPO + retinoid** (*Epiduo*®)

Mild to Moderate acne:
If no improvement, **topical antibiotics** can be used in combination with BZPO to avoid development of resistance:

Topical **combination antibiotic + retinoid** (*Isotrexin*® or *Treclin*® - but contraindicated in pregnancy)
or
Topical **combination antibiotic + BZPO** (*Duac*®)

Review the need to continue topical antibiotics after 3 months to limit antibiotic resistance (see notes)

Moderate
As mild but greater extent
<5 cysts

As for mild acne with the addition of oral antibiotics

1. **Lymecycline** 408mg once daily
2. **Oxytetracycline** 500mg twice daily
3. **Clarithromycin** 500mg twice daily

Always co-prescribe with a topical retinoid or BZPO to reduce development of antibiotic resistance

Change to alternative antibiotic if:
- Inadequate response after 3 months
- Unacceptable side effects
- Relapse while on treatment

An effective well-tolerated antibiotic can be continued for 6 months before discontinuing. Re-start if acne flares up again.

Severe
As for moderate but with >5 cysts and/or scarring

Antibiotics as for moderate acne

Early referral to Dermatology for consideration of isotretinoin treatment if no response

Criteria for Isotretinoin:
- No response or relapse on treatment with at least 2 oral antibiotics, given for >3 months with full compliance, **or**
- Severe cystic acne with scarring, **or**
- Extreme psychological response to acne, **or**
- Prolonged acne beyond age 25

Referral for Isotretinoin - include the following to reduce the number of hospital visits required:
- Document dates, length of course and outcome of all oral antibiotics given to prevent duplication
- All women of childbearing age should be on effective contraception for at least 5 weeks to satisfy Pregnancy Prevention Programme unless there are exceptional circumstances (co-cyprindiol acceptable)

For **Women**, if inadequate response after 3-4 months, especially if contraception is also required, **consider adding any COCP** (or co-cyprindiol 2nd line)

Title: North of Tyne & Gateshead Guidelines for the Management of Acne
Developed by: Newcastle-upon-Tyne Hospitals Trust, Newcastle Gateshead CCG, North Tyneside CCG and Northumberland CCG
Approved: September 2016
Review: September 2018

Management of Acne – Key Prescribing and Counselling Information for Healthcare Professionals

General prescribing advice:

- Check for acne inducing medication e.g. lithium, phenytoin, ciclosporin, progesterone contraceptives, oral/topical corticosteroids, anabolic steroids, vitamin B12 injections (this is NOT an exhaustive list) & ensure patient is not using comedogenic (greasy) emollients or hair preparations.
- To improve compliance with topical preparations encourage patients to test a small amount on inside of forearm once daily for 5 days, then leave on face just for a couple of hours or use on alternate days before progressing to overnight applications. Treat whole area not just existing spots.
- Prescribe gels for greasy skin, creams for dry skin; use keratolytics at night as inflammatory response will fade by the morning.
- Products in alcohol bases are generally lower cost than aqueous bases, and should be used in preference where suitable.
- Give patient information leaflet http://www.patient.co.uk/health/Acne.htm to improve understanding and compliance
- Images to guide prescribing are available at http://www.pcds.org.uk/clinical-guidance/acne-vulgaris#images

Benzoyl peroxide (BZPO): has keratolytic and antimicrobial properties; it can bleach bedding and clothing.

- lower concentrations seem to be as effective as higher concentrations; start low and increase concentration gradually
- counsel patient to apply at night, there will be local skin irritation upon initiation but scaling and redness will often subside with treatment; if troublesome, consider reducing application frequency or suspend until irritation subsides and reintroduce at a reduced application frequency
- Avoid excessive exposure to sunlight.
- Some forms of BZPO are available to purchase 'over the counter' and have a lower acquisition cost than a prescription.

Topical retinoids: have anticomedonal properties;

- several months of treatment may be required to achieve optimal response; continue treatment until no new lesions develop
- counsel patient that redness and skin peeling can occur initially but will often subside with treatment; if troublesome, consider reducing application frequency or suspend until irritation subsides and reintroduce at reduced application frequency
- avoid use in severe acne over large areas;
- avoid exposure to UV light or if unavoidable use appropriate sunscreen and protective clothing
- are contraindicated in pregnancy; counsel women of child bearing age to use effective contraception (oral progestogen only contraceptives not indicated as may worsen acne).

Azelaic acid: has antimicrobial and anticomedonal properties;

- is considered less likely to cause local irritation than BZPO therefore may be an alternative in facial acne;
- can cause skin lightening in type V and VI skin but this may be helpful for post-inflammatory pigmentation

Topical antibacterials:

- can cause mild skin irritation, rarely sensitisation and GI disturbances reported with topical clindamycin;
- antibacterial resistance to *P.acnes* is increasing therefore to avoid development of resistance use in combination with other topical preparations such as benzoyl peroxide or retinoids.
- avoid concomitant treatment with oral and topical antibacterials (to reduce anti-microbial drug resistance);
- can be useful in patients wanting to avoid systemic antibiotics;
- treatment with topical antibacterials should be continued for up to 3 months; prescribers should evaluate the benefit of continuing treatment beyond this point (e.g. if acne is still improving), taking account of an increased risk of antimicrobial resistance, and the licensed duration of use for individual products.

Systemic antibiotics:

- Tetracyclines are contra-indicated in pregnancy/breastfeeding women and patients under 12 years of age; clarithromycin may be a suitable alternative for these patients. Absorption of tetracyclines is affected by antacids.
- Prescribing topical adapalene, fixed dose adapalene with benzoyl peroxide or azelaic acid with oral antibiotics reduces the development of resistant strains of *P. acne*
- There is a lack of evidence to suggest one tetracycline is superior to another in terms of efficacy. Once daily preparations which can be taken with food and plenty of water, may reduce nausea and aid compliance (especially in teenagers).
- Doxycycline may cause more photosensitivity than lymecycline especially in higher doses and fair skinned individuals. Use of non-comedogenic sunscreens may prevent this.
- Minocycline is no longer considered a first line therapy due to associated serious adverse drug reactions
- Once patients have had a sustained improvement to systemic treatment (at least 3 months) consider discontinuing and continue to manage with topical treatments.

Contraception:

- For women wanting contraception, or whose moderate papulo-pustular acne is not improving after 3 months of oral antibiotics and topical keratolytic, a low acquisition cost COCP (especially those containing levonorgestrel) may be effective.
- Co-cyprindiol is especially suitable for women with PCOS/ hirsutism, for those with moderate nodular or severe acne and 2nd line if not improving after 3 months of standard COCP, oral antibiotics and topical keratolytic.
- Oral isotretinoin: only to be initiated and prescribed by a consultant dermatologist due to the serious side effects including teratogenic and possible psychiatric effects; ensure women are using effective contraception prior to referral.