

Clinical Management in Primary Care

- Treatment is determined by severity of the acne and the extent to which it bothers the individual. The presence of scarring should prompt more intensive treatment
- ***SELF-CARE: Encourage patients to buy their own benzoyl peroxide products over the counter where possible (Note supply issues. Confirm availability with local pharmacy)**
- No treatment works quickly in acne. Warn patient it is likely to take 2-3 months to see initial improvement and up to 6 months to see the full benefit

General Prescribing Points

- **Avoid topical retinoids and tetracyclines in pregnancy or breastfeeding, avoid tetracyclines in children (up to age 12)**
- In pregnant patients, the recommended treatments are benzoyl peroxide +/- topical erythromycin
- All retinoids (except adapalene) are unstable with benzoyl peroxide so apply separately if both are prescribed
- **DO NOT USE MINOCYCLINE** to treat acne as it is associated with a greater risk of lupus erythematosus-like syndrome and sometimes causes irreversible pigmentation
- Do not treat with systemic antibiotic and a different topical antibiotic as this significantly increases the risk of antibiotic resistance

Treatment Regimes to use after 1st-line self-care (minimal make-up, wash with mild soap, do not scrub):

Mild Acne	Mild to Moderate Acne	Severe Acne	Very Severe Acne
<ul style="list-style-type: none"> • Typically limited to the face, Uninflamed lesions • Benzoyl peroxide to be bought OTC. 	<ul style="list-style-type: none"> • On the face and often mild truncal disease, Comedones present • Topical therapy recommended. May require additional systemic treatment 	<ul style="list-style-type: none"> • More extensive lesions or acne unresponsive to topical antibiotic • Systemic treatments should be used, useful for truncal disease where topical application is difficult 	<ul style="list-style-type: none"> • Facial lesions and widespread truncal disease • Nodules & cysts present, signs of acne scarring developing
TREATMENT: 2nd line	TREATMENT: 3rd line	TREATMENT: 4th line	TREATMENT: Specialist
<p>Benzoyl peroxide (BPO)* is the cheapest option, it works more quickly and is as effective as topical retinoids¹ Brand that is currently available: Acnecide gel 5%. NOTE: Panoxyl Aquagel was discontinued (June 17). <i>Start with 2.5% BPO ↑ strength and frequency gradually as necessary</i></p> <p>OR</p> <p>Topical Adapalene (Differin®)</p>	<p>Topical benzoyl peroxide 2.5% and adapalene 0.1% (Epiduo® gel) or separately OR</p> <p>Topical retinoid plus topical antibiotic e.g. Treclin® (tretinoin 0.025% + clindamycin 1%) or Topical antibiotic plus topical benzoyl peroxide* (prescribe separately or as Duac® (BPO 5% + clindamycin 1%). OR</p> <p>Consider addition of oral antibiotic (see severe section) instead of a topical antibiotic</p> <p>NOTE: Resistance is more likely with topical antibiotics and topical clindamycin can cause resistance to oral erythromycin. Only use topical clindamycin if retinoids/BPO aren't tolerated and the patient does not want to take an oral antibiotic (or has contra-indications).</p>	<p>Systemic antibiotic therapy PLUS topical retinoid/BPO treatment as per "Mild to Moderate" Acne. Select one of the following oral antibiotics (do not use with a topical antibiotic):</p> <p>Suggested dosage schedules (in increasing cost order):</p> <ul style="list-style-type: none"> • Doxycycline capsules 100mg daily OR • Oxytetracycline tablets 500mg bd OR • Lymecycline capsules 408mg daily (more expensive) <p>NOTE: Oral Erythromycin is only recommended for specific patient groups (e.g. pregnancy/breastfeeding & children under 12).</p>	<p>Systemic isotretinoin is indicated as monotherapy and is only available from secondary care: REFER</p>
NOTES	NOTES	NOTES	NOTES
<ul style="list-style-type: none"> • Apply topical retinoid once weekly increasing gradually to od • Rapid increase can lead to redness, soreness and excessive peeling • DURATION: 6-8 weeks then review 	<ul style="list-style-type: none"> • Topical erythromycin (Zineryt®) is no longer included in this guidance due to increasing resistance with topical erythromycin • Increase freq. of topical retinoid gradually to every night • Topical antibiotics should not be used in isolation; use in combination with retinoid or BPO • DURATION: 12 weeks then review 	<ul style="list-style-type: none"> • Choice depends on side-effects and resistance, no data to distinguish between the antibiotics in terms of efficacy • Always combine systemic antibiotic with topical anti-acne agents retinoids +/- BPO to reduce resistance and improve outcome • DURATION: The need for continued antibiotic treatment should be reviewed at 3 months due to risk of resistance 	<ul style="list-style-type: none"> • Indicated for more severe disease or where acne has proven resistant to systemic antibiotic therapy - especially where there are signs of acne scarring. • Used as monotherapy • DURATION: At least 16 weeks
<p>Once a suitable regime has been determined, gradual stepping down of treatment (e.g. from systemic plus topical to just topical) can be indicated once full therapeutic effect has been achieved, to find the minimum necessary to maintain suitable improvement.</p>			

Oral Contraceptives

- For female patients, combined oral contraceptives may be used in combination with topical treatments or systemic antibiotics
- A Cochrane review³ confirmed the efficacy of **combined oral contraceptives** in treating inflammatory and non-inflammatory acne but found few differences in efficacy between the different types, including cyproterone acetate, which is often recommended
- It is therefore not clear whether formulations containing cyproterone acetate (Dianette® which is licensed for severe acne) should be favoured, especially because this agent may increase the risk of venous thromboembolism⁴. The risk of blood clots in the veins with these medicines is 1.5 to 2 times higher than for combined oral contraceptives (COCs) containing levonorgestrel and may be similar to the risk with contraceptives containing gestodene, desogestrel or drospirenone. See MHRA Drug Safety Update⁵ for further information (references below).
- If Dianette® is being used, the need to continue treatment should be evaluated periodically by the treating physician
- Progestogen only contraceptives worsen acne. If no contraception is required, discuss pros and cons of hormonal treatment
- Recommendations⁶ are that no additional contraceptive precautions are required when combined oral contraceptives are used with antibacterials that do not induce liver enzymes (e.g. Doxycycline), unless diarrhoea or vomiting occur. Please check individual Summary of Product Characteristics for the patient's contraceptive and the chosen antibiotic for specific advice. These recommendations should be discussed with the patient.

Reasons for Specialist Care

- Severe nodulo-cystic acne
- Severe social or psychological problems secondary to acne
- Scarring
- Moderate acne that has failed to respond to treatment i.e. lack of any benefit from two courses of different oral antibiotics each lasting at least three months at suggested acne dosage as above or only partial benefit after 6 months
- Suspected underlying endocrinological cause for acne, e.g. polycystic ovary syndrome - Refer if necessary to endocrinologist
- Diagnostic difficulty (uncommon)
- Severe variant of acne such as acne fulminans - very rare severe inflammatory acne with fever, malaise and joint symptoms (very urgent referral)

Referral Form - Please include list of all treatments used in referral letter and any concomitant other medication and information regarding other medical conditions

Useful Links

- British Association of Dermatologists Leaflet on Acne: <http://www.bad.org.uk/site/793/default.aspx>

References

1. BAD guidelines for the management of acne vulgaris 2013 (draft form- to be published) <http://www.bad.org.uk/site/1/default.aspx>
2. European guidelines for the management of acne 2011 (expires Oct 2014) <http://www.google.co.uk/url?url=http://www.euroderm.org/edf/index.php/edf-guidelines/category/4-guidelines-acne%3Fdownload%3D7:guideline-treatment-of-acne&rct=j&frm=1&q=&esrc=s&sa=U&ved=0ahUKewjvm-uVvaTKAhWEkw8KHao3AF0QFggUMAA&usq=AFQjCNF5TY8zDnR1gcLw6Px6Stl1msMljw>
3. Arowojolu AO, Gallo MF, Lopez LM, Grimes DA. Combined oral contraceptives pills for treatment of acne. Cochrane Database System Rev 2012;7:CD004425 <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD004425.pub6/abstract;jsessionid=6ABF126A581B69C6A47A537CDA0DC8C9.f02t04>
4. Dawson AL and Dellavalle RP. Acne Vulgaris. BMJ 8th May 2013;346:f2634 doi:10.1136/bmj.f2634 <http://www.bmj.com/content/346/bmj.f2634>
5. Cyproterone acetate with ethinylestradiol (co-cyprindiol): balance of benefits and risks remains positive—updated prescribing advice June 2013. <http://www.mhra.gov.uk/Safetyinformation/DrugSafetyUpdate/CON287002>
6. British National Formulary 70th Ed. Sept 2015
7. Clinical Knowledge Summaries: Acne vulgaris (Sept 2014): <https://cks.nice.org.uk/acne-vulgaris>
8. MHRA Isotretinoin for severe acne: uses and effects (Dec 2014): <https://www.gov.uk/government/publications/isotretinoin-for-severe-acne-uses-and-effects>