DORSET MEDICINES ADVISORY GROUP

Acne Vulgaris - Primary Care Treatment Pathway

Acne vulgaris is a very common condition which can cause significant physical and psychological morbidity

This pathway relates to adolescents and adults > 12 years. About 15% of the adolescent population have sufficient problems to seek treatment. This is an age when self-esteem is very important.

Although in most patients acne clears up by the early 20s, more severe acne tends to last longer and a group of patients have persistent acne lasting up to the age of 30 - 40 years

Acne may scar – most of the time this is preventable by using the correct treatment given in a timely fashion

Given the large numbers of patients who suffer from acne, it is important that these should be managed effectively in primary care in the majority of cases. Early effective treatment for all with the condition will prevent scarring and promote self-esteem.

Referral criteria

Patients should generally be managed in primary care.

- If there is diagnostic uncertainty GPs should peer review in house and/or seek advice from secondary care via eRS Advice and Guidance. (Please attach a photo).
- Patients with moderate acne that is only partially responding to treatment and starting to scar should be referred to the Community Dermatology Service (DHUFT or About Health)
- Patients with severe acne or nodular cystic acne should be referred early to secondary care as a routine appointment. (Please attach a photo).
- Patients that have an inadequate response after at least 3 months treatment with at least two systemic antibiotics PLUS topical treaments should be referred to secondary care as a routine appointment. (Please attach a photo).
- Patients with associated and severe psychological symptoms, regardless of the physical signs, should be referred to secondary care.

Self-care advice

Advise about washing and skin care. In general, it is recommended that people with acne:

- Do not wash more than twice a day.
- Use a mild soap or cleanser and lukewarm water (as very hot or cold water may worsen acne).
- Do not use vigorous scrubbing when washing acne-affected skin; the use of abrasive soaps, cleansing granules, astringents, or exfoliating agents should be discouraged (advise use of a soft wash-cloth and fingers instead).
- Should not attempt to 'clean' blackheads. Scrubbing or picking acne is liable to worsen the condition.
- Ideally, should avoid excessive use of makeup and cosmetics.
- Use a fragrance-free, water-based emollient if dry skin is a problem (several topical acne drugs dry the skin). The use of ointments or oil-rich creams should be avoided as these can clog pores.

Advise about non-prescription treatments.

- Benzoyl peroxide is a useful topical drug available over-the-counter. However, there is a lack of evidence of benefit for other over-the-counter drugs.

Types of Acne

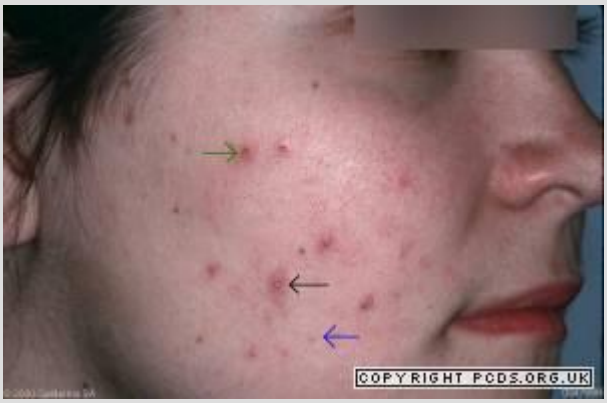

Figure: 1

Mild acne

Comedones (blue arrow), pustules (black arrow) and excoriated lesions (green arrow)

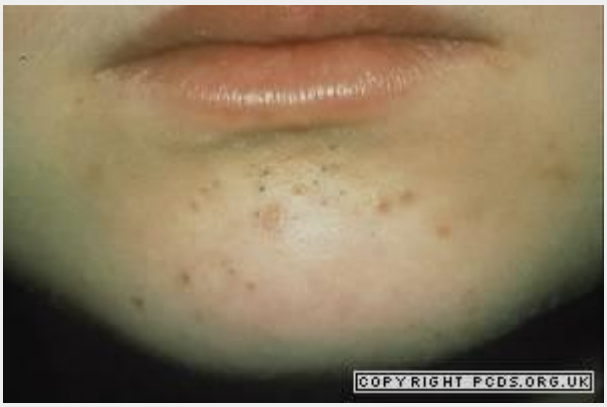

Figure: 2

Acne with open comedones (blackheads)

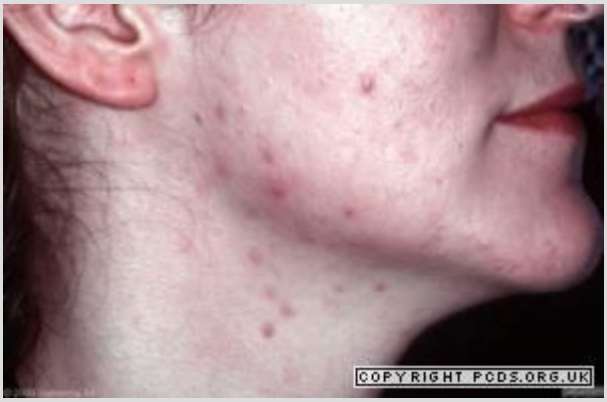

Figure: 3

Mild papular/pustular acne

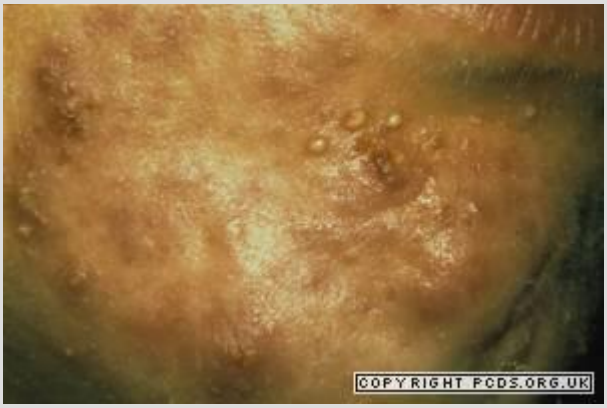

Figure: 4

Severe inflammatory acne; many pustules and actively inflamed nodules

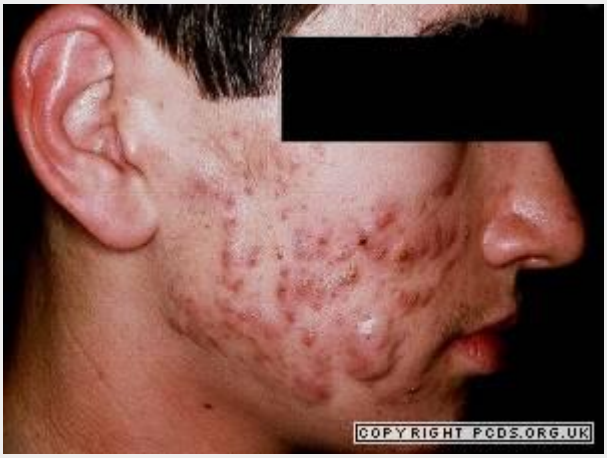

Figure: 5

Severe acne with nodules

Copied with kind permission from Dermatoweb

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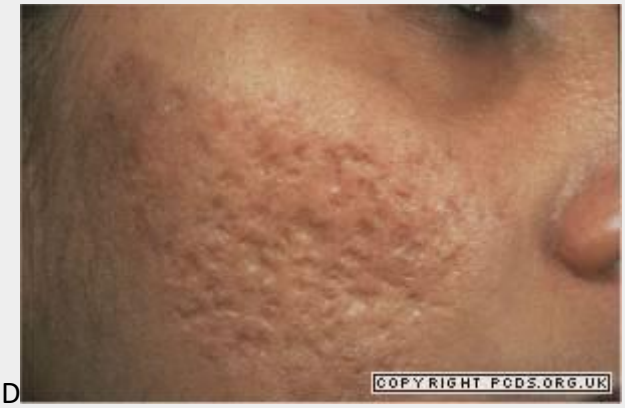

Figure: 6

Ice-pick scars

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http://www.pcds.org.uk/clinical-guidance/acne-vulgaris

Treatment of Acne Vulgaris

	Comedonal acne	Mild papular / pustular acne	Moderate inflammatory acne	Moderate-severe acne in women
1st line treatment choices (green traffic light categorised)	• Adapalene 0.1% • Adapalene combined with benzoyl peroxide 2.5% (Epiduo ®) • Isotretinoin gel (Isotrex®)	Use a combination product e.g. • Duac ® gel (benzoyl peroxide/clindamycin) • Treclin ® gel (tretinoin/clindamycin) • Epiduo ® gel (adapalene/benzoyl peroxide)	**Combine systemic antibiotics with topical agents** referred to in treatment of comedonal acne[1] • Lymecycline 408 mg OD (Tetralysal ®)[10] • Doxycycline 100 mg daily[10] • Oxytetracycline 500 mg BD[10] N.B • do not use Treclin® with the above tetracyclines. Oral antibiotics: follow up at 6-8 weeks: i) Good response- continue for additional 4-6 months (consider halving dose for latter half of treatment period) then stop; ii) Inadequate response – Continue for a minimum of 3 months before assuming treatment ineffective (consider referral at this stage). Continue topical treatment after stopping oral antibiotic; also consider combination of topical retinoid plus benzoyl peroxide (though may be poorly tolerated).[10]	• If no contraindications consider adding in Dianette ® to topical / systemic treatments • Consider Dianette® in patients with significant endocrinopathies such as PCOS
2nd line treatment choices (where 1st line ineffective,	• Azelaic acid	• Aknemycin ® Plus solution (erythromycin/tretinoin) • Isotrexin ® gel (erythromycin/isotretinoin)	• erythromycin 500 mg BD • clarithromycin 250 mg BD N.B if combining topical antibiotic with	

contra-indicated or not tolerated)			oral antibiotic can be of the same class	
Notes	**Follow-up** • It is important to have a way of monitoring response to treatment, e.g. using serial photography or standardised grading methods **Duration of treatment** • Following sustained improvement to treatment (at least three months) consider discontinuing systemic treatment; continue topical treatments. • Treatment is likely to be required for several years, for much of this time this could be an appropriate topical treatment, adding systemic treatment for flare-ups **Poor responders to treatment** • Wrong diagnosis e.g. rosacea • Poor compliance - due to a long history of acne, side-effects of treatment such as photosensitivity caused by doxycycline or irritation to topical treatments. If local irritation / dermatitis develops consider stopping treatment for a few days; using an oil-free moisturiser once or twice a day; if necessary using 1% hydrocortisone cream for five days twice daily; then reintroducing the treatment gradually eg two to three nights a week • P. acnes resistance is relevant for 10-20% of patients on tetracycline; 65% on erythromycin; more likely following many course of oral and/or topical antibiotics, and in those who were doing well and are now responding badly • If P.acnes resistance suspected, prescribe Epiduo ® gel or consider changing the type of systemic antibiotic Antibiotics: 1. It is not advisable to prescribe oral and topical antibiotics of different chemical groups simultaneously. 2. Lymecycline 408 mg OD (Tetralysal®) an hour before food, or doxycycline 100 mg daily should be seen as first line as they are more effective. The latter can occasionally cause photosensitivity. Contraindicated in pregnancy and in patients aged under 12 3. Oxytetracycline 500 mg BD is cheaper. Contraindicated in pregnancy and in patients aged under 12. 4. Minocycline is not recommended due to the increased risk of hepatotoxicity and lupus-like conditions.			
Secondary care referral for consideration of isotretinoin	Expert opinion in guidelines and review articles is that people who have or are at risk of scarring or depigmentation due to acne and those with significant psychological distress should be referred for specialist treatment. (NICE CKS) For patients with severe psychological symptoms regardless of physical symptoms or in association with significant acne isotretinoin may be prescribed.			

Prices and prescribing information [1-9] - Pricing information from Electronic Drug Tariff accessed 20th December 2018

Product name	Dose	Price
Adapalene 0.1% w/w (Differin® Cream/Gel)	Apply to the acne affected areas once a day before retiring and after washing. A thin film of cream/gel should be applied, with the fingertips, avoiding the eyes and lips. Since it is customary to alternate therapies in the treatment of acne, assess the continued improvement after three months of treatment. Ensure that the affected areas are dry before application. With patients for whom it is necessary to reduce the frequency of application or to temporarily discontinue treatment, frequency of application may be restored or therapy resumed once it is judged that the patient can again tolerate the treatment.	Gel/cream 45 g = £16.43.
Adapalene 0.1%, benzoyl peroxide 2.5% (Epiduo® gel)	Apply to the entire acne affected areas once a day in the evening on a clean and dry skin. A thin film of gel should be applied, with the fingertips, avoiding the eyes and lips. If irritation occurs, apply non-comedogenic moisturizers, use less frequently (e.g. every other day), suspend use temporarily, or discontinue use altogether. The duration of treatment should be determined on the basis of the clinical condition. Early signs of clinical improvement usually appear after 1 to 4 weeks of treatment	45 g = £19.53.
Isotretinoin 0.05% w/w (Isotrex ® Gel)	Apply sparingly over the entire affected area once or twice daily, preferably after washing and drying the skin. If undue irritation (redness, peeling, or discomfort) occurs, reduce frequency of application or temporarily interrupt treatment. The normal frequency of application should be resumed once the irritation subsides. Treatment should be discontinued if the irritation persists. 6-8 weeks of treatment may be required before the therapeutic effect is observed.	30 g = £5.94
Duac® Once Daily Gel, benzoyl peroxide 3%, clindamycin 1% Gel, benzoyl peroxide 5%, clindamycin 1%	Duac Once Daily Gel should be applied once daily in the evening, to the entire affected area. Excessive application will not improve efficacy, but may increase the risk of skin irritation. If excessive dryness or peeling occurs, frequency of application should be reduced or application temporarily interrupted. The safety and efficacy of Duac® Once Daily Gel has not been studied beyond 12 weeks in acne vulgaris clinical trials, so treatment should not exceed more than 12 weeks of continuous use.	3%: 30 g = £13.14 5%; 30 g = £13.14, 60 g = £26.28
Clindamycin 1% tretinoin 0.025% gel (Treclin gel)	Apply once daily at bedtime after the the entire face is washed with mild soap and dried. A pea-sized amount of medication should be squeezed onto one fingertip, dot onto the chin, cheeks, nose, and forehead; then gently rub over the entire face. Treatment should not exceed 12 weeks of continuous use without careful evaluation. Improvement may not be observed for several weeks after starting treatment.	30 g = £11.94
Azelaic acid 20%	Apply to the affected areas of skin twice daily (mornings and evenings). Patients with sensitive skin should be advised to use azelaic acid only once a day (in the evening) for the first week	30 g = £4.49

(Skinoren® 20% Cream) Azelaic acid 15% (Finacea® 15% gel)	of treatment and then proceed to twice daily applications. Before application, the skin should be thoroughly cleaned with plain water and dried. A mild skin-cleansing agent may be used. The duration of use can vary from patient to patient and also depends on the severity of the acne. In general, a distinct improvement becomes apparent after about 4 weeks. To obtain the best results, these may be used continuously over a period of several months	(Skinoren®) 30g = £7.48 (Finacea®)
Erythromycin Ph Eur 4% w/w and tretinoin BP 0.025% w/w (Aknemycin® Plus solution)	Apply to the affected areas once or twice daily. Treatment should continue for 9-12 weeks according to the condition of the skin. It should be noted that therapeutic improvement may not be observed for several weeks after starting treatment. Excess application of Aknemycin® Plus should be avoided since it may result in marked erythema, drying and discomfort of the treated areas	25 mL = £7.05
Isotretinoin 0.05% w/w and erythromycin 2.00% w/w (Isotrexin ® gel)	Apply in a thin film over the entire affected area once or twice daily after cleaning the skin gently with a mild cleanser and drying fully. Avoid close proximity to eyes, lips, and other mucous membranes. 6-8 weeks of treatment may be required before the full therapeutic effect is observed. Evaluate the benefit of continuing treatment beyond 12 weeks of uninterrupted use, taking account an increased risk of antimicrobial resistance Avoid over-saturation with Isotrexin® to the extent that excess medication could run into their eyes, and angles of the nose or other areas where treatment is not intended. If applied excessively, marked redness, peeling or discomfort may occur. Should this occur accidentally or through over enthusiastic use patients may use a moisturiser as needed and should reduce frequency of application or application should be discontinued for a few days. The normal frequency of application should be resumed once the irritation subsides. Treatment should be discontinued if the irritation persists.	30 g = £7.47
Lymecycline	408mg (one capsule) daily: treatment should be continued for at least 8 weeks.	28-cap pack = £4.22
Doxycyline	100mg daily with food or fluid for 6 to 12 weeks. Swallow with plenty of fluid in either the resting or standing position and well before going to bed for the night to reduce the likelihood of oesophageal irritation and ulceration. If gastric irritation occurs, give with food or milk. Studies indicate that the absorption of doxycycline is not notably influenced by simultaneous ingestion of food or milk	50 mg, 28-cap pack = £1.15 100 mg, 8-cap pack = £0.72
Oxytetracycline	500mg twice daily in single or divided doses should be administered for at least 3 months. The tablets are for oral administration and are best taken on an empty stomach (1 hour before food or two hours after). If gastric irritation occurs, tablets should be taken with food. Tablets should be taken well before going to bed.	250mg; 28-tab pack = £0.66
Erythromycin	500mg twice daily	250mg; 28-tab pack = £1.25

Clarithromycin	250mg twice daily. Swallow with a sufficient amount of fluid (e.g. one glass of water). Clarithromycin may be given irrespective of food intake	250 mg, 14-tab pack = £1.18

Based on:

Primary Care Dermatology Society – Acne Vulgaris. Accessed on 20th December 2018 via http://www.pcds.org.uk/clinical-guidance/acne-vulgaris

NICE Clinical Knowledge Summaries. Acne vulgaris. Last revised in April 2018. Accessed on 20th December 2018 via https://cks.nice.org.uk/acne-vulgaris#!topicsummary

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7. Summary of Product Characteristics. Skinoren Cream. Bayer plc. Accessed on 30th October 2015 via via www.medicines.org.uk/emc
8. Summary of Product Characteristics. Aknemycin Plus solution. Almirall Limited. Accessed on 30th October 2015 via via www.medicines.org.uk/emc
9. Summary of Product Characteristics. Isotrexin Gel. Stiefel. Accessed on 30th October 2015 via via www.medicines.org.uk/emc
10. http://www.nhs.uk/Conditions/Acne/Pages/Introduction.aspx
11. http://www.nhsantibioticguidelines.org.uk/downloads/CS47131-NHSNHCCG-Antibiotic-Guidelines-2018-FINAL-WHOLE-WEB-LIVE-v5Dec18.pdf

Version 2

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