Acne vulgaris:	
management	
[NG198]	Updated 2

# NG198

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## Acne vulgaris: management

This guideline covers managing acne vulgaris in adults, including advice to give regarding diet and managing relapses<sup>1</sup>

#### Skin care advice

• Advise people with acne to use a nonalkaline (skin pH neutral or slightly acidic) synthetic detergent (syndet) cleansing product twice daily on acne-prone skin.

• Advise people with acne who use skin care products (for example, moisturisers) and sunscreens to avoid oil-based and comedogenic preparations.

• Advise people with acne who use make-up to avoid oil-based and comedogenic products, and to remove make-up at the end of the day.

• Advise people that persistent picking or scratching of acne lesions can increase the risk of scarring.

#### Diet

Advise people that there is not enough evidence to support specific diets for treating acne.

For general advice about a balanced diet and how it could contribute to wellbeing see Public Health England's Eatwell Guide.

#### **Referral to specialist care**

Urgently refer people with acne fulminans on the same day to the on-call hospital dermatology team, to be assessed within 24 hours.

Refer people to a consultant dermatologistled team if any of the following apply:

• there is diagnostic uncertainty about their acne

they have acne conglobata

they have nodulo-cystic acne.

Consider referring people to a consultant dermatologist-led team if they have: • mild to moderate acne that has not responded to two completed courses of treatment (see table 1)

• moderate to severe acne that has not responded to previous treatment that contains an oral antibiotic (see table 1)

- acne with scarring
- acne with persistent pigmentary changes.

Consider referring people to a consultant dermatologist-led team if their acne of any severity, or acne-related scarring, is causing or contributing to persistent psychological distress or a mental health disorder.

Consider referral to mental health services if a person with acne experiences significant psychological distress or a mental health disorder, including those with a current or past history of:

- suicidal ideation or self-harm
- a severe depressive or anxiety disorder
- body dysmorphic disorder.

When considering referral, take into account the person's potential treatment options (for example, oral isotretinoin). Also see the NICE guidelines on:

• depression in children and young people for advice on recognition

- depression in adults for advice on recognition and assessment
- self-harm for advice on self-harm.

Consider condition-specific management or referral to a specialist (for example a reproductive endocrinologist), if a medical

## Table 1 Treatment choices for mild to moderate and moderate to severe acne vulgaris

Acne severity	Treatment
Any severity	Fixed combination of topical adapalene with topical benzoyl peroxide, applied once daily in the evening
Any severity	Fixed combination of topical tretinoin with topical clindamycin, applied once daily in the evening
Mild to moderate	Fixed combination of topical benzoyl peroxide with topical clindamycin, applied once daily in the evening
Moderate to severe	Fixed combination of topical adapalene with topical benzoyl peroxide, applied once daily in the evening, plus either oral lymecycline or oral doxycycline taken once daily
Moderate to severe	Topical azelaic acid applied twice daily, plus either oral lymecycline or oral doxycycline taken once daily

Advantages	Disadvantages
 Topical     Does not contain antibiotics	<ul> <li>Not for use during pregnancy</li> <li>Use with caution during breastfeeding (see page 6)</li> <li>Can cause skin irritation (see page 6), photosensitivity, and bleaching of hair and fabrics</li> </ul>
 • Topical	<ul> <li>Not for use during pregnancy or breastfeeding (see page 6)</li> <li>Can cause skin irritation (see page 6), and photosensitivity</li> </ul>
 Topical     Can be used with caution during pregnancy and breastfeeding	• Can cause skin irritation (see page 6), photosensitivity, and bleaching of hair and fabrics
<ul> <li>Oral component may be effective in treating affected areas that are difficult to reach with topical treatment (such as the back)</li> <li>Treatment with adequate courses of standard therapy with systemic antibiotics and topical therapy is a Medicines and Healthcare products Regulatory Agency (MHRA) requirement for subsequent oral isotretinoin, which is only recommended for severe acne (see pages 6 and 7 and the MHRA guidance on important risks and precautions for isotretinoin)</li> </ul>	<ul> <li>Not for use in pregnancy, during breastfeeding (see page 6), or under the age of 12</li> <li>Topical adapalene and topical benzoyl peroxide can cause skin irritation (see page 6), photosensitivity, and bleaching of hair and fabrics</li> <li>Oral antibiotics may cause systemic side-effects and antimicrobial resistance</li> <li>Oral tetracyclines can cause photosensitivity</li> </ul>
<ul> <li>Oral component may be effective in treating affected areas that are difficult to reach with topical treatment (such as the back)</li> <li>Treatment with adequate courses of standard therapy with systemic antibiotics and topical therapy is an MHRA requirement for subsequent oral isotretinoin, which is only recommended for severe acne (see pages 6 and 7 and the MHRA guidance on important risks and precautions for isotretinoin)</li> </ul>	<ul> <li>Not for use in pregnancy, during breastfeeding (see page 6), or under the age of 12</li> <li>Oral antibiotics may cause systemic side-effects and resistance</li> <li>Oral tetracyclines can cause photosensitivity</li> </ul>

disorder or medication (including selfadministered anabolic steroids) is likely to be contributing to a person's acne.

#### Managing acne vulgaris

The recommendations in this section cover mild to moderate and moderate to severe acne.

#### First-line treatment options

Offer people with acne a 12-week course of one of the following first-line treatment options, taking account of the severity of their acne and the person's preferences, and after a discussion of the advantages and disadvantages of each option (see table 1):

• a fixed combination of topical adapalene with topical benzoyl peroxide for any acne severity

• a fixed combination of topical tretinoin with topical clindamycin for any acne severity

• a fixed combination of topical benzoyl peroxide with topical clindamycin for mild to moderate acne

• a fixed combination of topical adapalene with topical benzoyl peroxide, together with either oral lymecycline or oral doxycycline for moderate to severe acne

• topical azelaic acid with either oral lymecycline or oral doxycycline for moderate to severe acne.

Consider topical benzoyl peroxide monotherapy as an alternative treatment to the options in table 1, if:

• these treatments are contraindicated, or

• the person wishes to avoid using a topical retinoid, or an antibiotic (topical or oral).

For people with moderate to severe acne who cannot tolerate or have contraindications to oral lymecycline or oral doxycycline, consider replacing these medicines in the combination treatments in table 1 with trimethoprim or with an oral macrolide (for example, erythromycin). Factors to take into account during consultations Take into account that acne of any severity can cause psychological distress and mental health disorders.

Discuss the importance of completing the course of treatment, because positive effects can take six to eight weeks to become noticeable (see also the section on supporting adherence in the NICE guideline on medicines adherence).

#### Factors to take into account when choosing a treatment option

Take into account that the risk of scarring increases with the severity and duration of acne.

To reduce the risk of skin irritation associated with topical treatments, such as benzoyl peroxide or retinoids, start with alternate-day or short-contact application (for example washing off after an hour). If tolerated, progress to using a standard application.

When discussing treatment choices with a person with childbearing potential, cover: • that topical retinoids and oral tetracyclines are contraindicated during pregnancy and when planning a pregnancy, and • that they will need to use effective contraception, or choose an alternative treatment to these options.

If a person receiving treatment for acne wishes to use hormonal contraception, consider using the combined oral contraceptive pill in preference to the progestogen-only pill (if oral isotretinoin treatment is likely to be used (see page 8).

If clinical judgement indicates a person may need treatment with oral isotretinoin for their acne in future:

• be aware that oral isotretinoin should not be used unless adequate courses of standard therapy with systemic antibiotics and topical therapy have been tried, in



line with the Medicines and Healthcare products Regulatory Agency (MHRA) guidance on important risks and precautions for isotretinoin, and

• take this into account when choosing any initial treatment option.

Do not use the following to treat acne:

- monotherapy with a topical antibiotic
- monotherapy with an oral antibiotic

• a combination of a topical antibiotic and an oral antibiotic.

#### Factors to take into account at review

Review first-line treatment at 12 weeks and: • assess whether the person's acne has improved, and whether they have any side-effects

• in people whose treatment includes an oral antibiotic, if their acne has completely cleared consider stopping the antibiotic but continuing the topical treatment

• in people whose treatment includes an oral antibiotic, if their acne has improved but

not completely cleared, consider continuing the oral antibiotic, alongside the topical treatment, for up to 12 more weeks.

Only continue a treatment option that includes an antibiotic (topical or oral) for more than six months in exceptional circumstances. Review at three-monthly intervals, and stop the antibiotic as soon as possible.

Be aware that the use of antibiotic treatments is associated with a risk of antimicrobial resistance (see the NICE guideline on antimicrobial stewardship).

If a person's acne has cleared, consider maintenance options (see page 9).

If acne fails to respond adequately to a 12-week course of a first-line treatment option and at review the severity is: • mild to moderate: offer another option from the table of treatment choices (see table 1) • moderate to severe, and the treatment did not include an oral antibiotic: offer another option which includes an oral antibiotic from the table of treatment choices (see table 1) • moderate to severe, and the treatment included an oral antibiotic: consider referral to a consultant dermatologist-led team.

If mild to moderate acne fails to respond adequately to two different 12-week courses of treatment options, consider referral to a consultant dermatologist-led team.

#### Oral isotretinoin treatment

Consider oral isotretinoin for people older than 12 years who have a severe form of acne that is resistant to adequate courses of standard therapy with systemic antibiotics and topical therapy (table 1). For example:

- nodulo-cystic acne
- acne conglobata



• acne fulminans

• acne at risk of permanent scarring.

If a person with acne is likely to benefit from oral isotretinoin treatment:

• Follow the MHRA guidance on important risks and precautions for isotretinoin. This includes:

- prescribing only by a consultant dermatologist-led team
- assessing and monitoring mental health

assessing and monitoring sexual function.

Fully inform the person (and their family and carers as appropriate) about the potential risks of isotretinoin treatment as well as the expected benefits before referral to the consultant-dermatologist-led team, and again before prescribing isotretinoin if that is the chosen treatment.

When considering oral isotretinoin for acne take into account the person's psychological wellbeing (see page 3), and refer them to mental health services before starting treatment if appropriate.

If a person is taking oral isotretinoin for acne:

• review their psychological wellbeing during treatment, and monitor them regularly for symptoms or signs of developing or worsening mental health problems or sexual dysfunction

• tell them to seek medical advice if they feel their mental health or sexual function is affected or is worsening, and to stop their treatment and seek urgent medical advice if these problems are severe.

#### Use of intralesional corticosteroids

Consider treating severe inflammatory cysts with intralesional injection of triamcinolone acetonide (0.1 ml of triamcinolone acetonide per cm of cyst diameter, at 0.6 mg/ml diluted in 0.9% sodium chloride). This should be done by a member of a consultant dermatologistled team. In June 2021 this was an off-label use for triamcinolone acetonide. See NICE's information on prescribing medicines for more information.

### Treatment options for people with polycystic ovary syndrome

For people with polycystic ovary syndrome and acne:

• treat their acne using a first-line treatment option (see page 6 and table 1)

• if the chosen first-line treatment is not effective, consider adding ethinylestradiol with cyproterone acetate (co-cyprindiol) or an alternative combined oral contraceptive pill to their treatment

• for those using co-cyprindiol, review at six months and discuss continuation or alternative treatment options.

Consider referring people with acne and polycystic ovary syndrome with additional features of hyperandrogenism to an appropriate specialist (for example, a reproductive endocrinologist).

#### Relapse

If acne responds adequately to a course of an appropriate first-line treatment (see page 6 and table 1) but then relapses, consider either:

• another 12-week course of the same treatment, or

• an alternative 12-week treatment (see table 1).

If acne relapses after an adequate response to oral isotretinoin and is currently mild to moderate, offer an appropriate treatment option (see table 1).

If acne relapses after an adequate response to oral isotretinoin and is currently moderate to severe, offer either:

• a 12-week course of an appropriate treatment option (see table 1), or

• re-referral, if the person is no longer under the care of the consultant

dermatologist-led team.

If acne relapses after a second course of oral isotretinoin and is currently moderate to severe, further care should be decided by the consultant dermatologist-led team. If the person is no longer under the care of the consultant dermatologist-led team, offer re-referral.

#### Maintenance

Encourage continued appropriate skin care (see page 3).

Explain to the person with acne that, after completion of treatment, maintenance treatment is not always necessary.

Consider maintenance treatment in people with a history of frequent relapse after treatment.

Consider a fixed combination of topical adapalene and topical benzoyl peroxide as maintenance treatment for acne. If this is not tolerated, or if one component of the combination is contraindicated, consider topical monotherapy with adapalene, azelaic acid or benzoyl peroxide (see page 6).

Review maintenance treatments for acne after 12 weeks to decide if they should continue.

#### Management of acne-related scarring

If a person has acne-related scarring, discuss their concerns and provide information in a way that suits their needs. Topics to cover include:

- possible reasons for their scars
- treatment of ongoing acne to help prevent further scarring (pages 6 and 8)
- possible treatment options for acne-related scarring
- the way their acne scars may change over time
- psychological distress.

If a person's acne-related scarring is severe and persists a year after their acne has cleared: • refer the person to a consultant dermatologist-led team with expertise in scarring management

• in a consultant dermatologist-led team setting, consider CO2 laser treatment (alone or after a session of punch elevation) or glycolic acid peel.

#### Terms used in this guideline

Acne conglobata A severe form of nodulo-cystic acne with interconnecting sinuses and abscesses.

#### Acne fulminans

A very serious form of acne conglobata associated with systemic symptoms.

#### Comedogenic

An ingredient that is likely to block skin pores.

#### Consultant dermatologist-led team

This team may include associate specialists and healthcare professionals accredited for extended roles for dermatology under consultant supervision.

## Fixed combination of topical adapalene with topical benzoyl peroxide

Formulation with either of these two concentrations:

- 0.1% adapalene with 2.5% benzoyl peroxide
- 0.3% adapalene with 2.5% benzoyl peroxide.

#### Fixed combination of topical benzoyl peroxide with topical clindamycin Formulation with either of these two concentrations:

• 3% benzoyl peroxide with 1% clindamycin

- 5% benzovi peroxide with 1% clindamycin
- 5% benzoyl peroxide with 1% clindamycin.

## Fixed combination of topical tretinoin with topical clindamycin

Formulation with:

• 0.025% tretinoin with 1% clindamycin.

#### Mild to moderate acne

Acne severity varies along a continuum. For mild to moderate acne, this includes people who have one or more of:

- any number of non-inflammatory lesions (comedones)
- up to 34 inflammatory lesions (with or without non-inflammatory lesions)
- up to two nodules.

#### Moderate to severe acne

Acne severity varies along a continuum. For moderate to severe acne this includes people who have either or both of:

- 35 or more inflammatory lesions (with or without non-inflammatory lesions)
- without non-inflammatory lesion
- three or more nodules.

#### *Oral lymecycline or oral doxycycline* Formulation of either:

- 408 mg lymecycline daily
- 100 mg doxycycline daily.

#### Synthetic detergent (syndet)

A synthetic detergent (syndet) is a blend of synthetic surfactants and is formulated to have neutral to slightly acidic pH similar to the skin. It is widely available in both solid and liquid forms as a skin-cleansing product.

#### Topical adapalene

Formulation with: • 0.1% adapalene.

#### Topical azelaic acid

Formulation with either of these two concentrations:

- 15% azelaic acid
- 20% azelaic acid.

#### *Topical benzoyl peroxide* Formulation with:

5% benzoyl peroxide.

Reference 1 NICE guideline [NG198]. Acne vulgaris: management. Last updated 17 May 2023. nice.org.uk/guidance/ng198

# **BLEMISH CONTROL CLEANSER & GEL**

For acne prone skin to be used alone or as part of a management routine

- Imperfections reduced -35% in 8 weeks\*
- Blackheads reduced -45% in 4 weeks\*



\*Clinical study, 52 subjects

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\*\*Survey conducted on 107 dermatologists in the UK, June 2023

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