

TOPICAL TREATMENTS FOR ACNE

PATIENT INFORMATION LEAFLET

What are they?

Topical medications (gels or creams) are the first choice for mild to moderate acne. These medications target different underlying mechanisms that drive the development of acne, and therefore your doctor will often recommend a topical preparation which combines two different medications. Topical preparations are also used to supplement the effects of tablets used for acne and therefore perseverance with these gels or creams is important. On average, improvement of acne can be seen after 6 weeks of using topical treatment, but the maximum effect is usually seen at 12 weeks. You should apply acne gels or creams thinly all over the affected body areas. This information leaflet will summarise the most commonly used topical medications and their effects.

Benzoyl Peroxide

This treatment comes in different concentrations ranging from 2.5-10% and in different forms including bar, cream, gel, lotion, pad, wash which are equally effective. It is anti-bacterial, anti-inflammatory and helps to unplug pores.

It can be used alone or in combination with topical or oral antibiotics to reduce the risk of bacterial resistance. It is effective in treating mild to moderate cases of acne when it is used as combination therapy with topical retinoid.

As topical treatment, it is generally applied once or twice daily to the affected skin area. Strong sunlight should be avoided if using benzoyl peroxide gel and it should be kept away from the eyes.

Side effects: Dry skin, redness and irritation. If this happens it should be applied less frequently. It can also cause bleaching of hair and clothes. If you notice a severe reaction, you should stop using it and notify your doctor.

Topical Retinoids

Topical retinoids are derived from vitamin A and come in various forms including cream, lotion, foam, emulsion or gel. Topical adapalene and tretinoin are licensed for use in children over the age of 12 and adults in the UK. Topical isotretinoin is licensed for use in adults in the UK.

Topical retinoids are not suitable for use during pregnancy or planning pregnancy as there is a risk of causing harm to the baby.

Topical retinoids unplug the oil glands by removing and peeling away dead skin cells from the surface of the skin. It also has some effect on reducing inflammation.

Application is usually once daily at bedtime.

It should be applied sparingly to the whole affected area 20 minutes after washing your face.

If you have sensitive skin, you can start off with the treatment three times a week and gradually increase the frequency to daily as tolerated. Alternatively, you can wash off the topical retinoid one hour after application.

Side effects:

- ❖ The most common side effects are skin irritation: dryness, peeling, redness, discomfort, stinging, burning and blistering of the skin. This tends to settle over time.
- ❖ Eye irritation
- ❖ The skin may be more sensitive to sunlight. It is advised to avoid excessive exposure to UV/ sunlight and use SPF sunscreen and protective clothing
- ❖ Facial waxing and other skin procedures that can lead to excessive irritation should be avoided during treatment with topical retinoids.

Topical Antibiotics

Topical antibiotics are usually used in combination with benzoyl peroxide or retinoids to reduce the chance of bacterial resistance.

Antibiotic treatment reduces the number of the bacterium *C.Acnes* and works especially well against inflamed spots though is less effective for white and blackheads.

They are available in the form of solutions, lotions, gels, and saturated pads. They should be started slowly, for example, twice a week, then frequency can be increased gradually leading to the recommended daily dose. It might take at least 8 weeks to see any visible response. Antibiotics should not be used for more than 6 months.

Duac® (topical benzoyl peroxide with topical clindamycin) is commonly prescribed in the UK. This is applied once daily in the evening. It should be applied to the entire affected area not just on each spot. As always, the advice is to start slowly with a small amount in the evening and assess side effects.

Duac® can be used with caution during pregnancy and breast-feeding.

Side effects:

- ❖ skin irritation with redness and peeling
- ❖ photosensitivity
- ❖ bleaching of the hair and fabrics.

Other treatments

Salicylic acid works by unblocking pores and reducing inflammation. Application is once daily then stepped up to two to three times daily if needed. It can cause skin dryness and peeling.

Azelaic acid also works by unblocking pores and reducing inflammation. It has added antimicrobial effects. It is used twice daily and can cause itching, burning, stinging, and tingling

Combinations

Combining the above topical therapies (benzoyl peroxide, antibiotics, retinoids) has been shown to be a more effective treatment approach for mild-moderate acne vulgaris with a smaller risk of side effects. These topical therapies have therefore become the main first-line treatments in mild-moderate acne.

Common combined topical therapies include:

Epiduo® (benzoyl peroxide with a retinoid)

Duac® (benzoyl peroxide with an antibiotic): The benzoyl peroxide enhances the effects of topical antibiotics while reducing rates of treatment resistance.

Treclin® (retinoid with a topical antibiotic) effective in the treatment of mild-moderate acne with less skin irritation compared to topical retinoid alone.

Self-Care

General measures that may help improve your acne treatment include using gentle skin care products, avoiding aggressive scrubbing or picking of the skin and using lukewarm water to wash your face. Avoid using oil-based preparations and instead use water-based 'non-comedogenic' products, as they're less likely to block the pores in your skin. Apply sunscreen daily.

Risk factors for acne

- ❖ Positive family history
- ❖ Change in hormones e.g. puberty and menstruation
- ❖ Intake of food with high glycaemic index
- ❖ Chronic history of smoking (particularly comedonal acne)
- ❖ Seasonal factors
- ❖ Medications such as steroids

Where can I find more information?

You may still have some unanswered concerns about your acne treatment. Here are some useful websites for further information. If you have any further questions, then please make an appointment with your treating clinician.

- * <https://www.bad.org.uk/pils/acne/>
- * <https://patient.info/skin-conditions/acne-leaflet>
- * <https://www.nhs.uk/conditions/acne/treatment/>