

Patient information from BMJ

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Dandruff

Most people get dandruff from time to time. More severe dandruff seems to be linked to yeasts that grow on your scalp. Most anti-dandruff shampoos work by killing these yeasts or stopping them growing.

We've looked at the research about dandruff and weighed up the evidence about how to treat it. You can use our information to talk to your doctor or pharmacist and decide which treatments are best for you.

What is dandruff?

Dandruff is flaky skin on your scalp. Some dandruff is normal, because the top layer of your skin flakes away naturally over time. But dandruff is sometimes caused by a medical condition called **seborrhoeic dermatitis**.

Seborrhoeic dermatitis is a skin condition that causes flaky or inflamed skin. It seems to be linked to yeasts that grow on oily parts of your body, like your scalp or around your nose. Yeasts are a type of fungus. When seborrhoeic dermatitis affects your scalp, it can cause large flakes of skin. In young children, this is called 'cradle cap'. Here, we look only at dandruff caused by seborrhoeic dermatitis in adults.

What are the symptoms?

Flakes of dandruff caused by seborrhoeic dermatitis tend to be oily, and they may be a white or yellowish colour. You may also get itchy or inflamed skin that looks a bit like a sunburn.

What treatments work?

Lots of shampoos are available to help with dandruff. Just washing your hair will help to remove flakes, but anti-dandruff shampoos also contain chemicals to control yeasts or reduce inflammation on your scalp. Most of these treatments are available over the counter. However, some require a prescription from a doctor, particularly at higher strengths.

Try to avoid getting anti-dandruff shampoos in your eyes, and rinse well with water if you do.

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Shampoos you can buy yourself

Most people start off by trying a commonly available anti-dandruff shampoo, such as one that contains **pyrithione zinc**. A well-known brand is Head & Shoulders.

Other common anti-dandruff shampoos contain **coal tar**. Brands include T-Gel and Polytar AF. One study found that using a coal tar shampoo for four weeks worked better than using an ordinary, non-medicated shampoo. Some people don't like the smell of tar shampoos, but many products are perfumed to try to reduce this problem.

You could also try a shampoo that contains **salicylic acid**. Salicylic acid is a chemical that helps to break down hard or scaly skin. Shampoos that contain salicylic acid include Meted (salicylic acid with sulfur) and Capasal (salicylic acid with tar).

For more severe dandruff, you can try a shampoo containing **ketoconazole**. Ketoconazole is a drug that kills fungi, including yeasts. One brand name for ketoconazole shampoo is Nizoral. In studies, people who used a ketoconazole shampoo for a few weeks had less dandruff or flaky skin, and less itching and redness.

Occasionally, people find that ketoconazole irritates their scalp. There's a bigger chance of getting skin irritation if you've recently used a corticosteroid treatment on your skin (see below).

Another treatment that's used for more severe dandruff is **selenium sulfide**. This is a chemical that helps to kill fungi. Brand names for selenium sulfide shampoo include Selsun and Head & Shoulders Intensive Treatment Dandruff Shampoo.

Side effects don't seem to be common with selenium shampoos. A few people get skin irritation. Some people find the shampoo bleaches their hair slightly or turns their scalp an orange colour.

Other treatments for dandruff include shampoos containing either **ciclopirox** or **miconazole**. These treatments kill fungi and can work well for dandruff, but the shampoos aren't available in some countries, including the UK.

Treatments you can get from a doctor

If you have dandruff caused by severe dermatitis of the scalp, and other treatments haven't helped, your doctor may suggest using a **corticosteroid shampoo or lotion**. One treatment that comes as a lotion or shampoo is betamethasone (brand names include Bettamousse and Betnovate).

Corticosteroids can have side effects, but using a corticosteroid shampoo for a short time shouldn't cause serious problems. Possible side effects include thinning of your skin or slight changes of skin colour.

What will happen to me?

Treatment can help get rid of dandruff, although it often comes back. You may need to use your anti-dandruff shampoo again from time to time. You may also be able to use your

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shampoo regularly to help stop dandruff coming back. Ask your doctor or pharmacist how often you should be using your treatment.

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