

Treatment with diphencyprone for alopecia areata

Dermatology Department

Information for Patients

Produced: January 2024

Review: January 2027

Leaflet number: 1462 Version: 2

Introduction

This leaflet will give you more information about treating alopecia areata with diphencyprone.

What is Alopecia areata?

Alopecia areata is an auto-immune condition. It causes your body's immune system to attack the hair follicles where your hair grows.

What is Diphencyprone?

Diphencyprone is a chemical that usually causes an allergic reaction. This allergic reaction may help to improve your alopecia areata.

Diphencyprone is an unlicensed medication. This means it is not licensed in the UK for treatment of alopecia areata. It is still safe to use. Diphencyprone has been used to treat skin for 30 years.

Diphencyprone is a highly flammable liquid. All bottles should be stored in a cool place. They should also be kept out of any light, as the diphencyprone can be affected by direct sunlight and artificial lights. **Diphencyprone should be kept out of reach of children.**

Health information and support is available at www.nhs.uk
or call 111 for non-emergency medical advice

Visit www.leicestershospitals.nhs.uk for maps and information about visiting Leicester's Hospitals
To give feedback about this information sheet, contact InformationForPatients@uhl-tr.nhs.uk

What happens before I start treatment with diphencyprone?

You will go to a dermatology clinic where you will meet a doctor who specialises in skin (dermatologist) or specialist nurse. At this clinic, we will ask you questions about your medical history and any medicines you take. We will do any clinical examination and investigations that are needed. We will also ask you to sign a consent form if you want to be treated with diphencyprone and we will give you a treatment record booklet.

If you have any questions or concerns you can speak to the specialist nurse at this visit and any follow up visits.

You should not start treatment with diphencyprone if you are pregnant, planning to become pregnant in the next 6 months or are breast feeding. Any other person applying the treatment should not be pregnant, planning to become pregnant in the next 6 months, or breast feeding. You should stop the treatment straight away if you do become pregnant.

This is because the effects of diphencyprone have not been studied during pregnancy. Diphencyprone is not known to affect fertility of males or females.

What do I need to do before each treatment?

- You should wash and dry your skin before you apply the treatment.
- **You should always take great care when applying diphencyprone to the skin. Always wear gloves and an apron.**
- Please tell the nurse or doctor if you have started any new medicines

What do I need to do after applying diphencyprone?

- Do not touch your scalp once the solution has been applied. If you do touch your scalp, you should wash your hands immediately.
- You must keep the area of skin that has been treated out of the sun. The sun's rays break down the chemical and stop it working.
- You should not sunbathe, swim or use a sun bed for 48 hours after applying diphencyprone.
- If you are applying treatment to your scalp, you should wear a hat if you go outside. Try to use a hat that can be washed every time it has been worn.
- You must not wash your hair for 48 hours after applying the treatment.
- If you wear a wig, you should wear the same wig for 48hrs after treatment. You should then wash your scalp and the wig. The usual shampoo you use to wash your wig will be fine.
- At your first treatment we will give you a prescription for a strong steroid cream or ointment. If you have a very bad reaction, for example severe redness, itch, soreness or blisters, you should apply the cream or ointment. If the reaction does not settle after a few days please contact our dermatology nurse.

What happens during my treatment with diphencyprone?

It is very important that the diphencyprone solution is only applied the way you have been shown by the dermatologist or specialist nurse.

There are 3 stages to treatment with diphencyprone:

Stage 1 Creating an allergic reaction to diphencyprone

A strong solution of diphencyprone (usually a 2% solution) is painted onto a small area on the arm or scalp. An allergic reaction will often happen after the first application. If you do not get an allergic reaction, a weaker solution (0.1%) is painted on the same area 2 weeks later. This is then repeated every 2 weeks until a reaction happens. If a reaction does not happen then we will stop treatment. At your first appointment, after the treatment has been applied, you will need to wait in the clinic for 1 hour to make sure you do not have a severe reaction.

An allergic reaction will show up as a red itchy change in your skin

Stage 2 Testing to find the right strength of diphencyprone for your treatment

Once you have developed the allergy, we need to find the correct strength of diphencyprone solution that will cause just enough, but not too much, of an allergic reaction. A small area of skin is painted with a very weak solution of diphencyprone. The strength of the solution is increased every 6 to 8 weeks until you get a mild allergic reaction. A mild reaction will be pink and a bit itchy for about 36 hours.

Stage 3 Treatment with regular painting onto the skin of the correct strength of diphencyprone

We will give you the right strength of diphencyprone, and show you how to apply it to the target area of skin. Only 1 side of the head is treated at a time to make sure that any regrowth is from the treatment and is not a spontaneous regrowth. If the treatment is causing regrowth it will only be on the side where the treatment has been applied.

What will happen after I apply the treatment?

After applying the diphencyprone, the skin may become a bit pink and slightly itchy, this reaction should settle in 36 to 48 hours.

If the reaction to the diphencyprone is worse than expected then the skin may get very itchy and may blister.

The steroid cream or ointment prescribed on the first visit may be applied until the reaction has settled.

If you run out of or lose the steroid treatments you should tell the nurse or doctor. They will be able to prescribe you a new tube.

What are the risks and side effects of this treatment?

The main side effects are the expected itch and slight discomfort of an allergic skin reaction, this is called allergic dermatitis. If this is quite severe, then the dermatitis can blister, weep and be

uncomfortable. Allergic reactions like this are very rare but this might happen at the beginning of the treatment.

If you feel lightheaded, tightness in your chest or have difficulty breathing you should immediately tell a nurse in the department. You may be given antihistamine and other treatment if needed. If this happens you should not have diphencyprone treatment in future.

You may get swollen glands, particularly at the back of your neck. This is because of the inflammation produced by the treatment.

If any of the solution gets onto other areas of the skin through touching or rubbing, then an allergic reaction can happen in these other areas. The steroid cream or ointment will need to be applied to these areas until the skin settles. Take care to avoid the solution coming into contact with other people's skin, or they will have the same reaction. If it does get onto other people's skin, they should wash the area straight away.

About 1 in 10 people who have this treatment get a very itchy, bumpy rash called nettle rash or urticaria. If you have this type of reaction, stop the treatment and take antihistamine tablets (for example loratadine, available over the counter in a pharmacy or supermarket). If you are not sure what to do please contact our dermatology nurse or your GP.

Another rare side effect is that your skin colour might change in the areas where diphencyprone has been applied. Your skin may get lighter (hypopigmentation) or darker (hyperpigmentation). You may also see white marks on your skin (vitiligo). If you see changes in your skin colour please stop using diphencyprone straight away and tell the nurse at your next appointment.

Sometimes during treatment you may get a different reaction to a new application of diphencyprone even if the same strength is used. You may get weaker or stronger than expected allergic dermatitis. If the reaction is too strong, for example it causes excessive redness or itch, you get any blisters, or it is too uncomfortable, please stop treatment and tell the nurse at your next appointment.

How long will I have treatment with diphencyprone?

You will usually have treatment for at least 6 to 8 months. If you do not have any reaction in that time, it is unlikely to happen with longer treatment. You will be able to try the treatment again after 12 months. If diphencyprone has not worked for you we will talk to you about what you can do next.

Will diphencyprone cure my Alopecia areata?

If diphencyprone treatment works, it can get your hair to grow again.

- 30 out of 100 people will have a good regrowth
- 25 out of 100 people will have a moderate regrowth
- 45 out of 100 people will have unsatisfactory or almost no regrowth

If the alopecia areata affects your whole head, the chances of successful treatment are lower with about 20 out of 100 people getting good hair growth.

Sometimes once the hair has re-grown it continues to grow, but in one half to three quarters of people it is lost again and more diphencyprone treatment can be given.

