

Diphencyprone Contact Immunotherapy for Alopecia Areata

What is Diphencyprone and Immunotherapy?

Diphencyprone is a chemical in lotion form that generates a specific allergic reaction in the skin of an individual. A patient must first be sensitized with a high strength (2%) and then after one week (to allow for the development of the allergic response), weaker concentrations (eg 0.001%) can be applied. Immunotherapy is a technique to induce the body's immune system and attract it to the skin surface and away from the hair follicles, allowing the hair follicles to recover and to start growing hair again.

Does it hurt?

The aim of treatment is to produce a mild irritation in the skin that lasts for several days. The skin may become red and a degree of itch is common. If there is no irritation the treatment is unlikely to work.

What other side effects are there?

Diphencyprone can cause varying degrees of eczema that can range from mild redness to frank blistering. Occasionally you can get inflammation of the follicles (folliculitis) and enlargement of the lymph glands, but these are both uncommon.

How can the irritation be minimised and yet maximise the benefit?

The effects of Diphencyprone are variable from person to person, so it is best to start with a very low concentration and very gradually titrate the strength on a weekly basis under specialist supervision. At the point that the reaction is at the desired strength, it is likely that that will become your treatment dose for the remaining weeks.

What happens if the skin weeps or becomes crusty?

Weeping would suggest a stronger reaction than that desired. The treatment should be stopped in the first place and the skin allowed to recover. If it is very painful in the surrounding skin, or the crust is very golden in colour, it is possible that a secondary infection has occurred and you should seek medical help.

How long do I need to use it for and when will I see any benefit?

Diphencyprone treatment should be used for a minimum of 3 months to assess whether it will have benefit and even if there is no visible growth at that point, it is advised to persevere for up to 6 months. If you do start to get some regrowth, it is important to continue with the treatment but the frequency of application can be altered under specialist guidance. Not everyone will respond to treatment. If there is no sign of any hair by 6 months, despite appropriate titration and regular use, it is advised that you stop the treatment.

How effective is treatment?

The response rate in patients with patchy disease are 30 to 40%.

