

Preparation of epicutaneous tests with Minoxidil at 2% and 5%

C Chaguaceda¹, V Aguilera², MT Bosch¹, N Depreux³, A Morales¹, L Laguna¹, S Garcia-Xipell¹,
L Estrada¹, E Terricabras¹, C Quiñones¹.

¹Hospital Germans Trias i Pujol, Pharmacy department, Badalona, Spain ² Consorci Sanitari del Maresme, Pharmacy department, Mataró, Spain
³ Hospital Germans Trias i Pujol, Allergology Department, Badalona, Spain.

Background and importance

➤ Topical minoxidil solution is a safe and effective treatment for alopecia. However, some patients present pruritus and scalping. Patients suffering from allergic contact dermatitis may benefit from patch testing to determine the causative allergen.

Aim and objectives

➤ Describe the design, preparation and results of patch tests and prick tests for minoxidil.



Material and methods

➤ A battery of epicutaneous tests, both for minoxidil and the excipients present in the commercial drug.

Results

The following battery of epicutaneous syringe tests for minoxidil patch test was designed:

- Minoxidil 2 and 5% in liquid vaseline
- Minoxidil 2 and 5% in DMSO
- 1 mL of liquid vaseline.
- 1 mL of DMSO.
- 1 mL of propyleneglycol 10, 50 and 100%.
- 1 mL 70° alcohol.



Additionally, the following syringes for prick tests were prepared:

- Sterile minoxidil 2 and 5% in sodium chloride 0.9% (*compounded as 20mg and 50mg in 1mL*).
- Propyleneglycol prick test was obtained commercially.

The compounding were prepared ready to use.

Results after exposure were negative in the immediate readings, as well as at 48 and 96 hours, ruling out this drug and its excipients as causing the hypersensitivity.

Conclusion and relevance

➤The design and preparation of patch tests and prick tests are key when it comes to dismiss hypersensitivity to a specific drug. Excipients must be taken into account to rule out their involvement.

