

THE USE OF AN EMPTY LIGNOCAINE CRIMP VIAL AS A STORAGE MEDIUM FOR DIPHENYLCYCLOPROPENONE SOLUTION

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Sir,

Therapeutic challenge: Diphenylcyclopropenone (DPCP) is used, commonly, as a topical immunotherapeutic agent for alopecia areata and warts. One of the challenges faced with DPCP is its stability. Due to this issue, acetone is used as a diluent, and the solution is conventionally stored in screw-capped, airtight and amber-coloured containers, in a dark room, preferably at a temperature of four degrees Celsius. Studies have reported stability of DPCP, in solution, for a duration of more than 60 days. But in that period, evaporation of acetone occurs, which changes the concentration of the solution, and hampers its storage.^(1, 2) With more lapse in time, even deposition of DPCP crystals can occur at the bottom of the container. (Figure 1) All this may make treatment cumbersome, as making the solution afresh, eachtime, is time consuming and may even sensitize the clinician to this drug.



Figure 1 :

a-An amber colour bottles with screw cap used conventionally
 b- Deposition of DPCP crystals at the bottom of the container due to evaporation of the acetone.

The Solution: Empty lignocaine injection crimp vials are readily available in the dermatology clinic. Without removing the rubber stopper and metal cap, these are first washed with acetone. If the vial is not of an amber colour, it can be wrapped with black paper. It is labeled with the formulated concentration of DPCP. After preparing the solution, it is injected into the vial with the help of a syringe and needle, and stored in a refrigerator. Storage in a vial with a rubber stopper and metal cap will prevent



Figure 2 :

a-An amber colour, empty lignocaine injection vial with intact rubber stopper and metal cap.
 b-A transparent vial covered with black paper.
 c-Withdrawing DPCP solution with help of needle and syringe at each use.

evaporation of the acetone, and thus, the subsequent change in concentration of the solution. Whenever the solution is to be used, it is withdrawn in a glass beaker with the help of a syringe and needle. (Figure 2) This makes treatment with DPCP, extremely convenient for the clinician.

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