

A multipurpose handle for vitiligo surgery and beyond

Problem

Vitiligo surgery is an important procedure amongst the surgical therapies offered by dermatologists in their day-to-day practice. The commonest procedures undertaken are mini-punch grafting, suction blister grafting and cellular grafting popularly known as the melanocyte transplantation. By default, the dermatosurgical instruments are adapted from other specialties and hence may require modification or innovation of new instruments especially suited to the requirements of dermatologic surgery. There are numerous tricky steps in the various vitiligo surgeries including precise placement of the punches in the recipient area without altering the dermal and epidermal side (in minipunch

grafting), removing the mucous tissue from the dermal side and spreading the blister grafts on the glass slide (in blister grafting) and teasing the incubated graft in epidermal suspension transplantation. As of now, varied instruments including jeweler’s forceps, hypodermic needles, non-toothed forceps, broken prong of forceps, etc., are used for the above steps. There is an unmet need for a standardised, reliable, sturdy, user friendly, maintenance-free, sterilisable instrument that can handle all these situations.

Solution

We customised a stainless-steel instrument that can address all the issues as a one for all tool [Figures 1a and 1b]



Figure 1a: The stainless-steel instrument

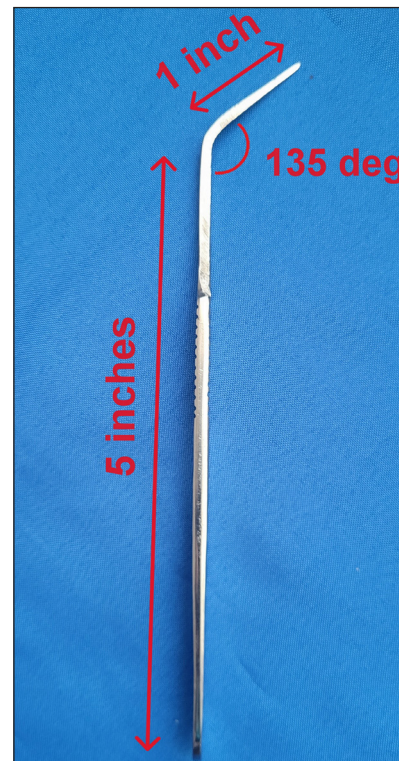


Figure 1b: The dimensions of the instrument explained graphically. The outer surface of the 1” length area is roughened to facilitate easy clearing of the mucus in the blister interior and teasing of the graft after incubation.

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[Video 1]. The instrument is user friendly, can be made by any surgical manufacturer at ease and has all the qualities of a sturdy surgical instrument for procedural dermatology. In addition to aforementioned indications, it can be tried in hair transplantation too to fix the grafts in the recipient area.

Declaration of patient consent

Patient's consent not required as patients identity is not disclosed or compromised.

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Nil.

Conflict of interest

There is no conflict of interest.

Video 1: Video showing the utility of the instrument in vitiligo surgeries

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