

Use of Dermatoscope to Monitor the Repigmentation of Various Vitiligo Surgical Procedures

Dear Editor,

Surgical intervention in stable vitiligo is classified broadly as tissue grafting and cellular grafting.^[1] Split-thickness skin grafting, mini punch grafting, suction blister grafting and follicular unit extraction constitute tissue grafting, whereas non-cultured epidermal cell suspension is an example of cellular grafting. Colour match after the procedure is as important as extent of repigmentation.^[2]

Objective methods in the evaluation of vitiligo include colorimetry and morphometry used to monitor colour match and extent of repigmentation, respectively.^[3]

Colorimeter is an expensive, non-invasive instrument to measure the colours reflected from the surface using a tristimulus system, and the quality of repigmentation can be assessed and recorded.^[4]

Dermatoscopy has been used to evaluate the activity of vitiligo.^[5] To the best of our knowledge, this is the first report in literature to use dermatoscope to monitor the result of various surgical procedures in vitiligo. Dermatoscopic examination of repigmented lesions was performed in five patients who underwent split-thickness grafting, mini punch grafting, suction blister grafting, follicular unit extraction and non-cultured melanocyte

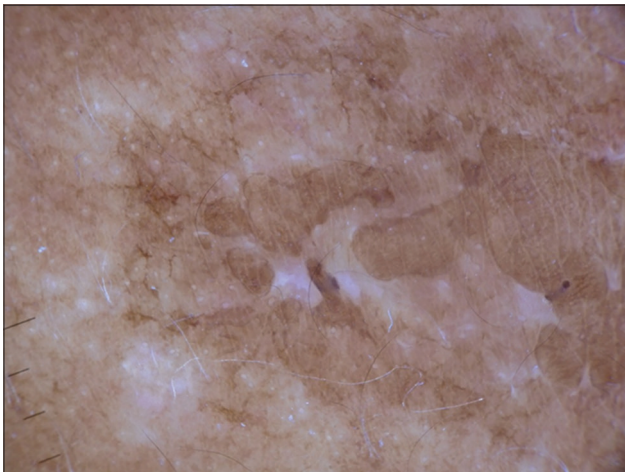


Figure 1: Dermatoscopy of repigmentation of split-thickness skin grafting ($\times 10$) shows patchy diffuse repigmentation with hyperpigmentation in many areas

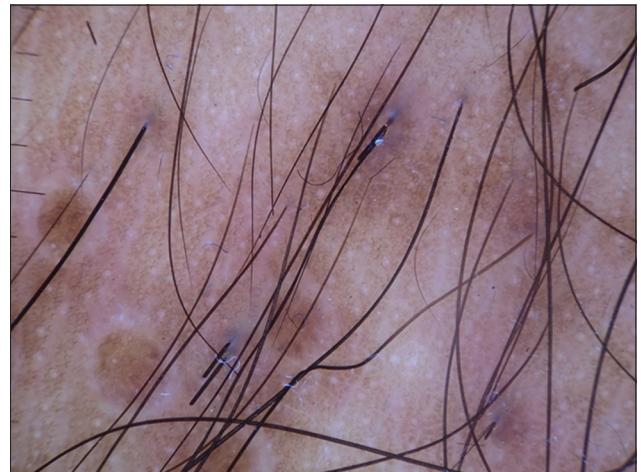


Figure 2: Dermatoscopy of repigmentation of mini punch grafting ($\times 10$) showing reticulate repigmentation with perigraft halo of depigmented areas

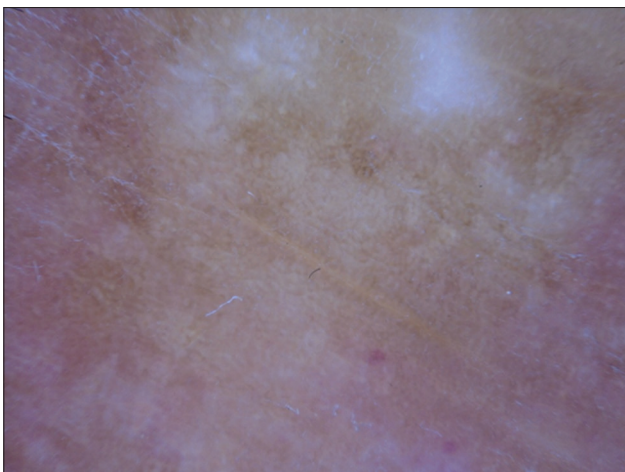


Figure 3: Dermatoscopy of repigmentation of suction blister grafting ($\times 10$) showing patchy reticulate repigmentation with hyperpigmentation in a few areas



Figure 4: Dermatoscopy of repigmentation of follicular unit extraction ($\times 10$) showing complete reticular repigmentation with hyperpigmentation in a few areas

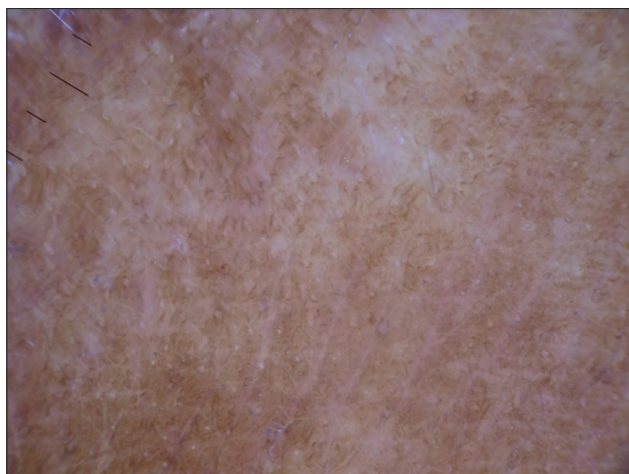


Figure 5: Dermatoscopy of repigmentation of non-cultured epidermal cell suspension (×10) showing near complete reticular and diffuse repigmentation with uniformity in colour

transfer using a pocket dermatoscope which gives a ×10 magnification (DermLite DL3, 3Gen Inc., USA) at least 3 months after the surgical procedure. Images were taken with a Sony Cybershot DSC-W800 20.1 MP digital camera after attaching it to the dermatoscope with a universal adapter [Figures 1-5]. The best colour match was seen with non-cultured epidermal cell suspension followed by follicular unit extraction.

We direct further studies in evaluating the colour match with the dermatoscope comparing it with objective tools such as colorimeter in future and prospective studies with standardised protocols taking sites, type of vitiligo and adjuvant therapy into consideration as well.

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Conflicts of interest

There are no conflicts of interest.

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REFERENCES

1. Majid I. Grafting in vitiligo: How to get better results and how to avoid complications. *J Cutan Aesthet Surg* 2013;6:83-9.
2. Parsad D, Pandhi R, Dogra S, Kumar B. Clinical study of repigmentation patterns with different treatment modalities and their correlation with speed and stability of repigmentation in 352 vitiliginous patches. *J Am Acad Dermatol* 2004;50:63-7.
3. Alghamdi KM, Kumar A, Taïeb A, Ezzedine K. Assessment methods for the evaluation of vitiligo. *J Eur Acad Dermatol Venereol* 2012;26:1463-71.
4. Hourblin V, Nouveau S, Roy N, de Lacharrière O. Skin complexion and pigmentary disorders in facial skin of 1204 women in 4 Indian cities. *Indian J Dermatol Venereol Leprol* 2014;80:395-401.
5. Thatte SS, Khopkar US. The utility of dermatoscopy in the diagnosis of evolving lesions of vitiligo. *Indian J Dermatol Venereol Leprol* 2014;80:50-5-8.

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