



PIGMENTATION

EFFICACY OF PLATELET-RICH PLASMA (PRP) IN COMBINATION WITH NARROWBAND-ULTRAVIOLET B (NB-UVB) PHOTOTHERAPY IN THE TREATMENT OF VITILIGO: CASE REPORT SERIES

Dendy Dendy Zulfikar⁽¹⁾ - Adniana Nareswari⁽¹⁾ - Indah Julianto⁽¹⁾ - Arie Kusumawardani⁽¹⁾ - Ammarilis Murastami⁽¹⁾

Faculty Of Medicine Sebelas Maret University / Dr. Moewardi General Hospital, Dermatovenereology Depertement, Surakarta, Indonesia (1)

Background: Vitiligo is an acquired depigmenting disorder with no entirely satisfactory treatment. Narrowband–Ultraviolet B (NB-UVB) phototherapy is an emerging, effective, and safe therapy for vitiligo, but the treatment course often requires a long duration of time. Platelet-Rich Plasma (PRP) has been used in wide variety of surgical procedures and clinical treatment. In this case report series, we explore the effect of PRP injection on the outcome of short-term NB-UVB therapy for the patients with stable vitiligo.

Observation: This case report series included 3 stable vitiligo patients with overall symmetrical lesions. In each patient were treated with NB-UVB therapy twice weekly in addition to intradermal injection of PRP every 2 weeks for 3 months. Clinically the improvement was highly significant in the repigmentation after 3 months therapy.

Key message: Platelet-rich plasma (PRP) is an autologous preparation of platelets in concentrated plasma, and contain various growth factors secreted from α-granules of concentrated platelets activated by aggregation inducers. The beneficial effect of PRP in vitiligo could be suggested through these growth factors which stimulate keratinocytes and fibroblasts proliferation with subsequent improvement of their interaction with melanocytes leading to the stabilization of melanocytes. Further research is required to compare the effycacy of this combination therapy with NB-UVB therapy alone as a control.





