



PIGMENTATION

## SKIN SEEDING TECHNIQUE USING A MOTORIZED 0.5-MM PUNCH FOR REFRACTORY VITILIGO: A METHOD FREE FROM THE DIRECTION OF PUNCH GRAFTING

Jung Min Bae<sup>(1)</sup> - Sung Hye Eun<sup>(1)</sup> - Hanna Lee<sup>(1)</sup> - Han Mi Jung<sup>(1)</sup> - Jiehoon Kim<sup>(2)</sup> - Dong Seok Kim<sup>(3)</sup>

*St. Vincent's Hospital, Department Of Dermatology, St. Vincent's Hospital, College Of Medicine, The Catholic University Of Korea, Suwon, Republic Of Korea<sup>(1)</sup> - Dr. Kim's Skin & Laser Clinic, Dr. Kim's Skin & Laser Clinic, Suwon, Republic Of Korea<sup>(2)</sup> - Eureka Skin & Laser Clinic, Eureka Skin & Laser Clinic, Suwon, Republic Of Korea<sup>(3)</sup>*

**Introduction:** Although punch grafting is a simple technique for the treatment of refractory vitiligo, the time-consuming nature and frequent cobblestoning remain the limitation of the procedure. We devised a skin seeding technique (SST) using a motorized 0.5-mm punch to overcome these limitations.

**Objective:** To show the effectiveness of the SST for refractory vitiligo, and to compare the treatment outcome of the SST according to the direction of punch grafting.

**Materials and Methods:** This was a prospective split-body clinical study. A total of 100 lesions in 50 patients (6 to 67 years old) with stable vitiligo refractory to nonsurgical treatment were included between June 2017 and May 2018. In each patient, two lesions in the same body area were divided into the right-side-up and upside-down group, respectively. A 0.5-mm punch loaded into the handpiece of micromotor was used for skin graft from both donor and recipient sites. In the right-side-up group (n = 50), the grafts were placed into the chambers of the recipient site in the right direction, and in the upside-down group (n = 50), the grafts were placed upside down. After 1-week of steri-strip fixation, the lesions were treated with excimer laser for 3 months.

**Results:** Treatment success (defined as  $\geq 75\%$  repigmentation) was achieved in 72% of the right-side-up group and 76% of the upside-down group, respectively. Cobblestone appearance was apparent in 4% of the right-side-up group and 2% of the upside-down group, respectively. Most of the patients were very satisfied with this technique in both groups, and no major systemic or local complications were reported.

**Conclusions:** This technique is rapid and convenient with notably minimal rates of adverse events. The SST is promising to treat refractory vitiligo on an outpatient basis, particularly in





patients with small lesions and in patients who are unlikely to tolerate prolonged surgery.

