

# THE COMBINATION OF THE MINI-PUNCH TECHNIQUE AND PHOTODYNAMIC THERAPY FOR THE TREATMENT OF MANDIBULAR KELOIDS AND HYPERTROPHIC SCARS

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## Running Title

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## BACKGROUND

Mandibular keloids and hypertrophic scars can exert significant effects on the appearance of a patient. However, current treatments are not effective in all cases. Consequently, it is vital that we identify a safe and effective treatment method. To investigate the therapeutic effect of the mini-punch technique combined with photodynamic therapy (PDT) on mandibular keloids and hypertrophic scars.

## METHODS

Twenty patients with mandibular keloids and hypertrophic scars were enrolled, including 5 cases of keloids and 15 cases of hypertrophic scars, with a total of 40 lesions. The mini-punch technique was performed first, and then PDT was conducted, once a week on three occasions in total.

## RESULTS

After 12 months of follow-up, 30 lesions had improved by more than 50%, thus achieving a good therapeutic effect (Fig1,2). The VSS score of patients ranged between 8-12 points with a mean of 9.60 ± 1.09 points prior to surgery and between 2-9 points with a mean of 4.15 ± 2.05 points at 12 months after surgery. The mean VSS score after treatment was significantly lower than that before treatment ( $t=11.80$ ,  $P<0.001$ ).

## CONCLUSION

A combination of the mini-punch technique and PDT is an effective treatment for mandibular keloids and hypertrophic scars.

