

# **Treatment of Facial Laceration Scars with a 1,550-Nm Fractional Erbium-Glass Laser**

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## **INTRODUCTION**

Facial laceration is one of the most common traumas in outpatient plastic surgery. Early postoperative fractional laser treatment has been used to reduce scarring in many institutions, but the most effective energy parameters have not yet been established<sup>1-3</sup>. This study sought to determine effective parameters in the treatment of facial laceration scars.

## **MATERIALS AND METHODS**

From September 2012 to September 2013, 57 patients were enrolled according to the study. To compare the low and high fluence parameters of 1,550-nm fractional erbium-glass laser treatment, we virtually divided the scar of each individual patient in half, and each half was treated with a high and low fluence setting, respectively. A total of four treatment sessions were performed at one-month intervals using the same parameters and clinical photographs were taken at every visit.

## **RESULTS**

Results were assessed using the Vancouver Scar Scale(VSS) and global assessment of the two portions of each individual scar. Final evaluation revealed that the portions treated with high fluence parameter showed greater difference compared to pre-treatment VSS scores and global assessment values, indicating favorable cosmetic results.

## **CONCLUSION**

Laser therapy is a promising method of scar treatment. Our institution compared the effects of high fluence and low fluence 1,550-nm fractional erbium-glass laser treatment for facial scarring in the early postoperative period and revealed that the high fluence parameter was more effective for scar management. Future studies should investigate the optimal number of sessions or protocols for scars in different locations.

## REFERENCES

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