



AESTHETIC AND COSMETIC DERMATOLOGY (LASERS SEPARATE CATEGORY)

APPLICATION OF NEW ANESTHETIC TECHNIQUE IN THE TREATMENT OF ACNE SCAR

Yz Tian⁽¹⁾ - Z Jian⁽¹⁾ - L Gao⁽¹⁾ - G Wang⁽¹⁾

Xijing Hospital, Fourth Military Medical University, Dermatology, Xi'an, China⁽¹⁾

Introduction: Pain during the laser treatment of acne scar was the main reason of fear or even give up of treatment. Although a few options are available to address pain during laser treatment, the effects were still unsatisfied.

Objective: The present study aims to investigate the effects of new anesthetic technique during the laser treatment of acne scar.

Patients and methods: From September 2015 to May 2018, 40 patients with acne scar were treated with laser in our department. Self-contrast method was employed. A topical anesthetic (lidocaine hydrochloride) was applied on the face for the first treatment, Laser therapy was performed one hour later. The experimental treatment was performed after 8 weeks, patients were administrated with intramuscular injection of midazolam hydrochloride in combination with surface anesthesia (lidocaine hydrochloride). All patients were given the surveillance with ECG-monitor. Heart rate, blood pressure and SpO₂ were recorded continuously. The visual analog scale (VAS) was used for pain and anxiety assessment. Anterograde amnesia and degree of satisfaction were also recorded and analyzed.

Results: There were 14 male and 26 female. The median age was 24 years (range 18-38). Compared with treatment of surface anesthesia with lidocaine hydrochloride, the pain intensity and anxiety was significantly decreased and the anterograde amnesia and degree of satisfaction were significantly increased during treatment of intramuscular injection of midazolam hydrochloride combination with surface anesthesia with lidocaine hydrochloride (all $P < 0.05$).

Conclusions: Administration of intramuscular injection of midazolam hydrochloride combined with surface anesthesia significantly decrease the pain intensity and anxiety of patients, and significantly increase the anterograde amnesia and degree of satisfaction of patients.

