Influence of primary and secondary closure of surgical wound after impacted mandibular third molar removal on postoperative pain and swelling

Taheri talesh K¹ Rezvanian K² Afsar N³

¹- Associate Prof. Oral & Maxillo facial Dept. Tabriz university Dental Sciences
²- Dentist
³- Resident of oral & Maxillo facial surgery Dept-Islamic Azad University Dental Branch Tehran

Abstract:

**Background and Aim:** The purpose of the present study was to compare the influence of primary and secondary closure of the surgical wound on postoperative pain and swelling after removal of impacted mandibular third molars.

**Materials and Methods:** This is randomized clinical trial study 10 patients with bilaterally impacted mandibular third molars were included in the present study. All the patients underwent surgical removal of the bilaterally impacted teeth at the same appointment. Primary closure (group I) was performed on one side and secondary closure (group II) was performed on the other side. All the patients were assessed for pain, trismus and swelling using the visual analog scale, and the data were collected and analyzed with the paired t test after 2 and 7 days.

**Results:** The swelling and pain in group I was greater than that in group II, with a statistically significant difference (P < 0.005). The trismus in group I was greater than that in group II, with a statistically significant difference after 7 days (P=0.03).

**Conclusion:** Our results have shown that the patients in the secondary closure group experienced a significantly lesser amount of pain, trismus and swelling postoperatively compared the primary closure group.

**Keywords:** Impacted teeth, primary closure, surgery of third molar.

*Manuscript submitted: March 2010, Revised and acceptance: July 2010*

*Corresponding Author: Afsar.N : Oral and maxillofacial Dept., No 4,10th Neyestan, Pasdaran, Tehran.*

*Tel: 021-22564571 E-mail: nedaafsar@yahoo.com*