The effect of an absorbable gelatin dressing impregnated with triamcinolone within the olfactory cleft on polypoid rhinosinusitis smell disorders.

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Abstract: Chronic rhinosinusitis (CRS) is an inflammatory process that causes different clinical symptoms: nasal blockage and congestion, posterior and anterior nasal drip, and smell disorder ranging from reduced olfaction (hyposmia) to complete loss of smell (anosmia). It has been suggested that mechanical blockage of olfactory clef after polypectomy is responsible for the persistent impairment of olfaction in some cases. The aim of this study was to evaluate the efficacy of application of steroids at the olfactory cleft in improving olfactory function in patients who underwent sinus surgery. A double-blind, randomized controlled trial was conducted in Yazd, Iran, between March and December 2012. Eligible patients who had CRS with polyposis and underwent functional endoscopic sinus surgery were recruited. An absorbable gelatin dressing combined with triamcinolone (case) or normal saline (control) was applied at the site of surgery. Olfaction was assessed by butanol threshold tests before and 8 weeks after surgery. A total of 60 patients were enrolled into the study and were equally divided into triamcinolone and control groups. Subjects in both arms of trial experienced augmentation of smell function throughout the study; however, patients who received triamcinolone had better improvement after 8 weeks (p = 0.007). Complete remission rate was 100% in the triamcinolone group and the corresponding figure was 76% in the control group. We suggest that application of triamcinolone at the olfactory cleft can boost the effect of surgery in restoring olfactory function.

Keyword: triamcinolone, polypoid rhinosinusitis smell disorders