

Influencing factors of recurrence of chronic sinusitis after nasal endoscopic surgery

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In nasal endoscopic surgery, recurrence of chronic rhinosinusitis is not uncommon which may be due to the trauma and injury viz. bone exposure, fibrous scarring, and ostia stenosis caused by surgical procedure. Here, we have investigated the various factors that contribute to such recurrence. Eligibility assessment was conducted on all patients with chronic rhinosinusitis admitted to our hospital between January 2020 and April 2023, resulting in the recruitment of 200 patients scheduled for nasal endoscopic surgery. After a minimum of 12 months postoperative follow-up, patients included in the final analysis were categorized into recurrence and non-recurrence groups. Through multifactorial logistic regression analysis, smoking, VAS score, pterygoid sinus (S) score, sinus-oral sinus complex (OMC) nasal polyps, allergic rhinitis, deviated septum, and postoperative infection were identified as independent influencing factors for postoperative recurrence ($P < 0.05$). Thus, the factors influencing recurrence after nasal endoscopic surgery in patients with chronic sinusitis comprise smoking, VAS score, lesion extent (AE, S, OMC score), nasal polyps, allergic rhinitis, deviated septum, and postoperative infection. The study concludes that implementing effective clinical interventions targeting these factors is crucial for reducing recurrence rates in patients.

Keywords: Chronic rhinosinusitis, Sinus, Smoking