Effect of mitomycin-c (1 mg) in prevention of adhesion after endoscopic sinus surgery in ethmoid spheniod sinuses

Abstract

Introduction: This study was performed to determine the efficacy of Mitomycin C on synechia after FESS in ethmoid sinuses in patients admitted in Imam-Khomeini Hospital in 2011 and 2012.

Methods: In this interventional study, 30 patients with pan rhinosinusitis attending to Imam-Khomeini Hospital in 2011 and 2012 were enrolled and in one side after FESS, the mitomycin C and in the other side the normal saline was used and then the synechia frequency and severity and side effects were compared in one and six months between two sides.

Results: one month after operation, six (85.7%) patients in Mitomycin C and six (66.7%) patients of normal saline group had mild synechia and one (14.3%) patient in Mitomycin C and three (33.3%) patients in normal saline group had complete synechia. Six months after operation, eight (88.9%) patients in Mitomycin C and six (66.7%) patients of normal saline group had mild synechia and one (11.1%) patient in Mitomycin C and four (40%) patients in normal saline group had complete synechia.

The frequency and severity of synechia after FESS and the adverse effects were not significantly differed between two sides in one and six months after surgery.

Conclusion: Totally, based on the results of this study and comparison with other studies it may be concluded that Mitomycin C would have no statistically significant effect on prevention from postoperative synechia and reduction of its severity after FESS surgeries.
Keywords: FESS; Mitomycin C; Synechia