Endoscopic approaches to the maxillary sinus: A comparative study

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Abstract

**Background**

Treatment of inflammatory and neoplastic diseases of maxillary sinus requires appropriate surgical exposure. Despite the use of multi-angulated telescopes with kinds of curved instruments, there are still some areas which cannot be viewed and handled. So further approaches other than the standard technique are needed to improve access and visualization and make precise disease control possible.

**Aim**

The aim of this study was to compare the outcomes of middle meatal antrostomy approach -group A-, endoscopic prelacrimal recess approach -group B- and canine fossa approach -group C.

**Patients and methods**

The study included 60 patients with maxillary sinus lesions justifying surgery. Patients were classified into 3 groups A, B and C, each one included 20 patients and were subjected to middle meatal antrostomy approach, endoscopic prelacrimal recess approach, and canine fossa approach respectively. Comparison between groups was done regarding accessibility of each approach to visualize and reach the different walls and recesses of the maxillary sinus, intraoperative or postoperative complications and postoperative recurrence.

**Results**

No significant difference was found between group B and C regarding complete accessibility to different walls and recesses of the maxillary sinus. Only three (15%) patients from those who underwent middle meatal antrostomy approach had radiological and endoscopic recurrence, on the other hand none of those who underwent other approaches developed recurrence. Complications occurred in our study were quite few and not dangerous.

**Conclusion**

Prelacrimal recess approach and canine fossa approach are useful methods for diverse maxillary sinus lesions with excellent accessibility to all walls and recesses without lacrimal duct or inferior tur­binate injury and less recurrence.

**Keywords:**

Maxillary sinus, endoscopic approaches, middle meatal antrostomy approach, prelacrimal recess approach, canine fossa approach.