TRANSNASAL ENDOSCOPIC SPHENOIDOTMY: PATENCY AND FUNCTION

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ABSTRACT

The sphenoid sinus like all other paranasal sinuses is prone to mucosal inflammatory and allergic lesions. The aim of surgery is to establish proper drainage and aeration of the sinus cavity through a sphenoidotomy. This study included 20 patients who underwent endoscopic sphenoidotomy alone or in conjunction with endoscopic sinus surgery of the other sinuses. In 13 patients, surgery was performed bilaterally and in 7 unilaterally. Postoperative endoscopic evaluation revealed patent sphenoidotomy in 16 cases (80%) and occluded ostium in 4 cases (20%). The cavity was clear in 19 cases (95%) and the mucosa was healthy in 18 cases (90%). It was concluded that endoscopic sphenoidotomy is a safe and direct procedure with high patency rate and fairly good function.

INTRODUCTION

Drainage and aeration of the sinus cavity is the main treatment strategy in benign non neoplastic lesions of the sphenoid sinus. Many approaches were developed aiming at this target. Transethmoidal with external incision, transseptal with sublabial incision and endonasal transseptal and microscopic endonasal approaches are among them (Biltz and Carmel, 1985). The endoscopic endonasal approach is one of the best (Stankiewicz, 1989), but unless done by an experienced surgeon, it will carry risk of serious complications because of the deep location of this sinus and close proximity to important neurovascular structures. The aim of this study is to evaluate sphenoidotomy performed during functional endoscopic sinus surgery for patency and function.

MATERIAL AND METHODS

This study included 20 patients having inflammatory, polypoid and/or retention lesions of the sphenoid sinus. There were 12 males and 8 females. Their ages ranged between 25 and 60 years.

The main presenting symptoms were nasal obstruction, anterior and posterior, nasal discharge headache and/or smell affection. Past history of previous nasal and/or sinus surgery was obtained in 14 cases, in the form of simple polypectomy in 9 cases, turbinectomy in 3 cases, puncture and lavage in 3 cases, antrostomy in 2 cases, submucous resection of the nasal septum in one case and radical antrostomy operation in one case.

They were subjected to systemic nasal endoscopy and computed tomography. Ra-