Inverted Papilloma Originating from the Opticocarotid Recess

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ABSTRACT

Inverted papillomas (IPs) are rare, benign sinonasal neoplasms that tend to originate from the nasal septum or lateral nasal wall. However, a case of an inverted papilloma (IP) in the sphenoid sinus has recently been reported. IPs are characterized by a papillary growth pattern and can lead to nasal obstruction with or without symptoms. IPs are often diagnosed as inflammatory polyps, leading to delayed diagnosis. IPs can recur after surgical excision, and the recurrence rate is higher in cases of incomplete or incorrect resections.

INTRODUCTION

Objectives
1) Describe the case of inverted papilloma originating from the opticocarotid recess causing optic nerve dehiscence. 2) Explain the pathophysiology and natural history of inverted papillomas in the sphenoid sinus. 3) Examine the significance of a neoplasm originating from the anterior clinoid.

Methods
This case report was conducted in a tertiary hospital setting in 6/2011. The subject, a 49-year-old female, presented with an inverting papilloma originating from the opticocarotid recess causing optic nerve dehiscence. The intervention was endoscopic excision. Outcome was measured by clinical examination. Follow-up patient analysis was ongoing.

RESULTS
The patient was found to have an inverting papilloma (IP) of the sphenoid sinus. During pre-operative endoscopic view of poly-poid like mass. Pre-operative CT scan (sagittal view). figures 1, 2, 3, 4, and 5, the patient was referred from an outside facility with a computed tomography (CT) scan demonstrating a mass in the right sphenoid sinus. The patient’s history was significant for a previous history of IP in the right sphenoid sinus area several years before, and her new CT scan was suspicious for recurrence of the disease. The patient’s only main complaint was blurry vision on the left side. The patient was found to have an inverting papilloma (IP) of the sphenoid sinus. During pre-operative endoscopic view of poly-poid like mass.

CASE STUDY
A 49-year-old female with a history of smoking was referred from an outside facility with a computed tomography (CT) scan demonstrating a mass in the right sphenoid sinus. The patient’s history was significant for a previous history of IP in the right sphenoid sinus area several years before, and her new CT scan was suspicious for recurrence of the disease. The patient’s only main complaint was blurry vision on the left side. The patient was found to have an inverting papilloma (IP) of the sphenoid sinus. During pre-operative endoscopic view of poly-poid like mass.

An inverted papilloma (IP) is a rare, benign sinonasal tumor that tends to originate from the nasal septum or lateral nasal wall and is characterized by a papillary growth pattern. IPs are classified as non-invasive or invasive, depending on their ability to penetrate the basement membrane and erode adjacent bony structures. IPs are often diagnosed as inflammatory polyps, leading to delayed diagnosis. IPs can recur after surgical excision, and the recurrence rate is higher in cases of incomplete or incorrect resections.

Inverted papillomas are known for their unusual biological behavior, which makes management of the lesion difficult. They have the capacity to invade local anatomical structures and erode adjacent bony structures by pressure necrosis. IPs are known for their non-specific symptoms, such as tinnitus, hearing loss, and possibly a more complete resection of the tumor. However, the surgeon must be prepared to change to an open approach if the tumor is actually an inflammatory polyp with squamous metaplasia. IPs can be differentiated from inflammatory polyps based on histological examination.

In conclusion, inverted papillomas are rare, benign sinonasal neoplasms that tend to originate from the nasal septum or lateral nasal wall. However, a case of an inverted papilloma originating from the opticocarotid recess causing optic nerve dehiscence has been reported. This case highlights the importance of prompt and accurate diagnosis and treatment of inverted papillomas to prevent complications and recurrence.

REFERENCES

CONCLUSIONS
We present this case to emphasize the need for rapid identification and management of inverted papillomas of the sphenoid sinus, especially in light of the potential for opticocarotid recess dehiscence, which has not been previously described in the literature. Early management is crucial given the challenging anatomy of the sphenoid sinus and the vital structures at risk.

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FIGURES
Figure 1. Pre-operative endoscopic view of poly-poid like mass.
Figure 2. Intra-operative endoscopic view of the IP after resection. Optic nerve sheath is visible.
Figure 3. Pre-operative CT scan (sagittal view). The tumor occupies the right sphenoid sinus.
Figure 4. Pre-operative CT scan (coronal view). Arrow points to tumor, circle shows area of thinning of the bony wall.
Figure 5. Post-operative CT scan (anginal view). Arrow points to tumor in sphenoid sinus.
Figure 6. Inversion of papilloma originating from the opticocarotid recess after tumor resection. Optic nerve sheath is visible.