

Nasal Cylindrical Cell Papilloma

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Summary

Inverted papilloma is the most common benign tumor of nose and paranasal sinuses arising from lateral nasal wall and middle meatus^{1,2,5}. Histologically these tumors are composed of epithelial nests that are inverted, exophytic and cylindrical. Here we describe a clinical case of nasal cylindrical cell papilloma, which was treated by endoscopic excision.

Key Words: Cylindrical cell papilloma, Inverted papilloma, Endoscopic excision

Introduction

Sinonasal papilloma has various synonyms namely transitional cell papilloma, Ringertz tumor, inverted papilloma. Sinonasal papilloma is a benign epithelial tumor^{1,2,5}. Hyams, who reviewed 315 cases of papillomas of the nasal cavity and paranasal sinuses divided them in to inverted, fungiform, cylindrical cell types depending on the epithelial growth characteristics¹. Papillomas of either type have a tendency to recur after surgery. Inverted papilloma causes most clinical problems with aggressive growth and an association with malignancy¹. In this article we report 54 year old female who is initially diagnosed to have benign nasal polyp for which she under went endoscopic excision in 1996. She developed recurrent symptoms after 6 years in 2002. The histopathology revealed a cylindrical cell papilloma which was successfully treated by endoscopic excision.

Case Report

A 54 year female presented with 6 month history of left sided nasal obstruction and nasal discharge. She had previously had polyp removed from the nose and now her symptom had recurred. Examination showed

polypoidal mass in the left nasal fossa arising from middle meatus. No cervical node enlargement was noted. CT scan confirmed a mass filling in the left nasal cavity extending in to the left maxillary antrum and ethmoid sinus [Figure 1]. Biopsy was performed in the out patient clinic and was reported as cylindrical cell papilloma. She underwent endoscopic excision. Intra



Fig 1: CT scan [axial view] of paranasal sinus showing cylindrical papilloma filling the left nasal cavity extending in to left maxillary antrum and ethmoid sinuses

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CASE REPORT

operatively multiple polypoidal mass was found involving left lateral wall of the nasal cavity with extension into the maxillary antrum and ethmoid sinus. The postoperative care was uneventful. During follow up at 3 and 6 months a well epithelised maxillary antrum cavity and ethmoid sinus was noted.

Discussion

The nasal papilloma was first described by Ward in 1854¹. Hyams [1971] defined papilloma as a neoplastic growth of surface epithelium of the nasal cavity and paranasal sinuses¹. General polypoid tumor of the sinonasal tract comprises three histopathological types as defined by the WHO in 1991 1.) inverted papilloma, 2.) exophytic papilloma and 3.) columnar cell papilloma³. Cylindrical cell papilloma was characterized by a multilayered columnar cell. An epidermoid or squamous cell component was minimal or absent. The individual cell was columnar with well defined borders, an eosinophilic cytoplasm and a uniform round to oval dark nucleus with rarely a discernible nucleolus. A papilloma exhibiting both the cylindrical and epidermoid elements was classified according to the predominant element¹.

The individual lesions of the cylindrical cell papilloma exhibited both inverting and exophytic components. The neoplastic epithelium contained varying numbers of small mucous-containing cystic structures. Because of these numerous cystic structures, cylindrical cell papilloma is frequently mistaken histologically for rhinosporidiosis¹.

Clinical descriptions of cylindrical cell papilloma depicted a ragged papillary surface. The papilloma of the cylindrical cell type involved the maxillary sinus either alone or in conjunction with the adjacent lateral wall of the nasal cavity or the ethmoid sinus¹. The sinonasal papillomas have been reported in almost all age groups from adolescence to middle or old age with a typical peak incidence in the fifth and sixth decades of life. The fungiform papilloma involves a younger age group than does the inverted and cylindrical cell types. All recurrences occurred at essentially the same anatomic site as the previous surgical removal. No relation ship was noted between the histology of a

papilloma and its potential ability to recur. The frequency of recurrences did not appear to be concentrated in any age group. The principle cause of the recurrence is suggested as a result of inadequate surgical removal¹. The literature generally supports the association of malignancy with nasal papillomas^{1,3,4}. No correlation was found with the interval between the recurrence of a nasal area papilloma and the development of a malignancy.

The diagnosis of cylindrical cell papilloma is made only on the basis of the peculiar histologic structure. The anatomic site and clinical behavior of the cylindrical cell type lesion parallels that of the inverted papilloma. The cylindrical cell papilloma may be confused with an adenoma or adenocarcinoma. The treatment of inverted papilloma is wide local excision but controversy has prevailed over the best surgical approach. Tumor location is an important factor affecting the choice of approach. Traditionally this has required a medial maxillectomy through a transfacial or sublabial degloving approach. The advances in endoscopic surgical techniques together with advanced imaging have enhanced the ability of the surgeon to diagnose, localize and resect the tumor with greater precision. One potential advantage of endoscopic management is the magnification it provides. The endoscopic approach alone can be applied to tumors affecting the turbinates, ethmoid sinuses, limited involvement of maxillary, frontal and sphenoid sinuses. Lateral rhinotomy with enbloc medial maxillectomy still has a role in the management of inverted papilloma especially in patients with multi focal disease, malignant transformation and tumor originating from the frontal sinus and lateral maxillary wall². However, it is associated with scar formation, epiphora, dacrocystitis, neuralgia and longer hospitalization. In experienced hands the endoscopic surgery can safely be performed, obviating the need for external incisions⁵. Satisfactory results from endonasal endoscopic resection of sinonasal papillomas have been reported^{2,3,5}. In the appropriate clinical setting, the endoscopic approach can be used alone or combined with external approach depending on the tumor location. Close endoscopic follow-up by experienced surgeons is mandatory in the long-term management of inverted papilloma.

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