

# Trans-oral Resection of Nasopharyngeal Pleomorphic Adenoma, a Case Report

Ryan Grech, Charles Borg, Steve Micallef Eynaud

## Abstract

**Introduction:** Around 80% of all salivary gland tumours are pleomorphic adenomas, most commonly found in the parotid gland. This case report regards the rare finding of a pleomorphic adenoma in the nasopharynx.

**Case Presentation:** a 29 year old lady presented to the ENT department with a 4 month history of worsensng and non-resolving nasal obstruction, change in voice, snoring and right aural congestion. A smooth mass pushing the uvula forward was seen on oral examination, and flexible nasoendoscopy revealed an exophytic mass from the right nasopharynx. CT and MRI showed a non-erosive mass in the right nasopharynx. Incisional biopsy was carried out which showed features of pleomorphic adenoma. Lesion was excised using transoral technique to remove the tumour with an intact capsule.

**Literature Review and Discussion:** A PubMed search found only 12 previously reported cases of pleomorphic adenoma from 1970 to 2015. The treatment of choice was surgical in all cases, one case reports the use of radiotherapy, without affect. The trans-oral technique used in this case ensured that the tumour was removed with the surrounding capsule intact, thus reducing risk of recurrence.

**Conclusion:** This is the first reported case of nasopharyngeal pleomorphic adenoma from Malta. Diagnosis was made by the triple assessment – examination, radiology and histology. The tumour was excised completely and the plan is for the patient to have regular follow up.

## Keywords

Nasopharynx; nasopharyngeal; pleomorphic; adenoma

## Introduction

Pleomorphic adenomas are the most common salivary gland tumours, making up 70-80% % of all salivary gland neoplasms. These are most commonly found in the parotid glands. Presentation of a pleomorphic adenoma in the nasopharynx is a very rare occurrence.

## Case Presentation

A 29 year old female presented to the ENT department with a 4 month history of nasal congestion, change in voice, snoring and right aural congestion.

Trans-oral examination and nasoendoscopy revealed a smooth mass arising from the right side of the posterior nasopharyngeal wall.

A CT scan was performed as a first line investigation which showed an ill- defined mass with a central hypodense area arising from the right tonsillar bed. The initial radiological impression was of tonsillitis.

MR neck was performed to further characterise the lesion – this showed a 39 x 51 x 33 mm pedunculated mass arising from the right nasopharynx – the differential being chordoma or fibroma.

Incisional biopsy was performed, no collection could be identified. A biopsy was sent for histological examination – this showed features of pleomorphic adenoma.

The lesion was removed surgically via the trans-oral route by dissection of the tumour from

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## Case Report

the posterior aspect of the soft palate and nasopharyngeal mucosa. Histology of the lesion confirmed the finding of a pleomorphic adenoma.

The patient made an uneventful recovery with minimal post-operative morbidity.

### Literature Review and Discussion

A PubMed search including the keywords: nasopharynx; nasopharyngeal; pleomorphic; adenoma resulted in 77 publications found. Upon review of these articles, 12 articles were identified of nasopharyngeal pleomorphic adenoma – from March 1970 to August 2015, two of which were congenital.

Management of the condition is varied. A number of reports have mentioned the transnasal endoscopic route for resection.<sup>1-2</sup> Others described a combined endonasal and transoral route.<sup>3-4</sup>

All reports treated the condition surgically. The only case which attempted to treat the condition with radiotherapy was unsuccessful.<sup>5</sup>

A completely transoral route for excision was not found anywhere. In this case, retraction of the uvula allowed for the tumour to be well visualised and it was removed with the surrounding capsule intact.

As in pleomorphic adenomas found in the parotid gland, it is essential to remove the tumour as a whole to avoid its recurrence.

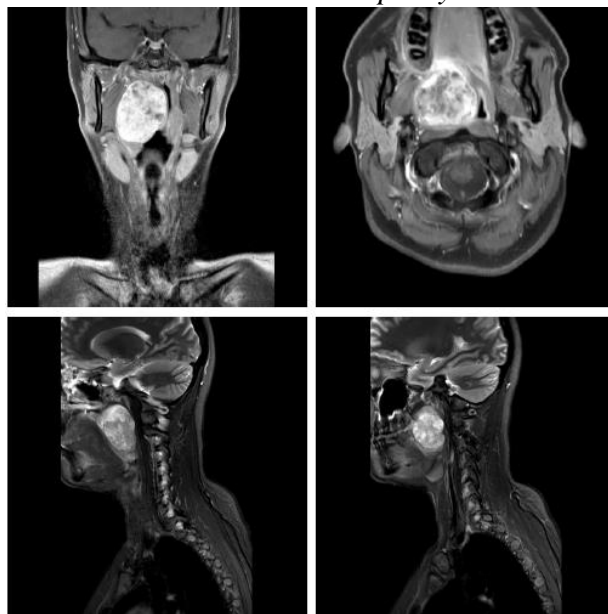
### Conclusion

Nasopharyngeal pleomorphic adenoma is a rarely reported entity, and this is the first reported nasopharyngeal adenoma in a Maltese subject. A case of a pleomorphic adenoma of the nasal septum was described prior to this case in Malta.<sup>6</sup>

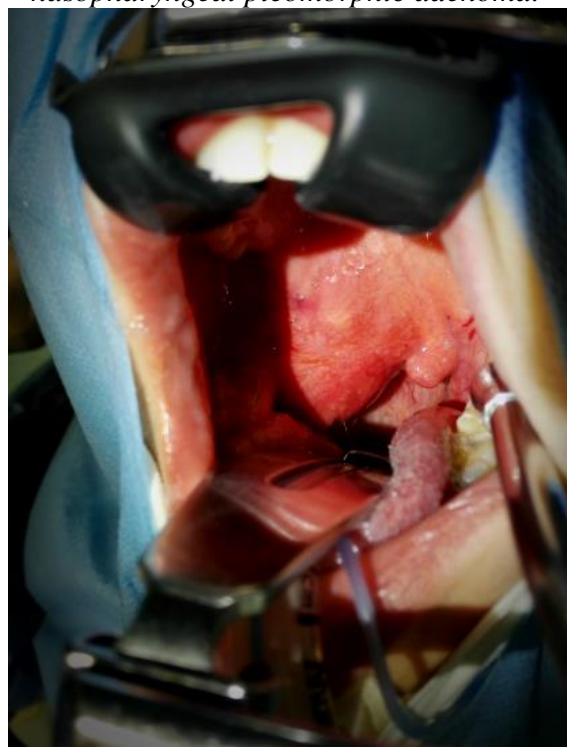
Diagnosis was made by clinical, radiological and histological means and removal of the tumour was performed via the transoral route, leaving an intact capsule.

The plan for the patient is to have regular post-operative surveillance visits with examination via flexible nasoendoscopy.

*Figure 1: MRI images of the pleomorphic adenoma in the nasopharynx.*



*Figure 2: Bulging of uvula due to nasopharyngeal pleomorphic adenoma.*



**Figure 3:** *Encapsulated Pleomorphic adenoma following removal*



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