

CASE REPORT

HYPOPHARYNGEAL SCHWANNOMA: A GHANAIAN CASE REPORT

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Abstract

This article seeks to highlight the need for a high index of suspicion for a hypopharyngeal tumour especially schwannoma in patients presenting with the feeling of a mass in the throat.

Schwannoma is a benign schwann cell encapsulated tumour with no genetic predilection. They are rarely found in the hypopharynx and when present may not cause any significant symptoms until they enlarge and cause dysphagia and upper airway obstruction because of laryngeal obstruction.

Schwannomas are differentiated from other soft tissue tumours like neurofibromas by the presence of Antoni A and B on histology and strong positivity for S100 protein with no or minimal mitotic activity.

These tumours are mainly managed by surgical excision either transorally or via lateral pharyngotomy.

We present the case of 28-year-old man who presented to our facility with the feeling of a mass in the throat of 2 months duration. After flexible nasolaryngoscopy and CT scan of the neck, a hypopharyngeal tumour with a sessile base was found. The tumour was excised endoscopically after elective tracheostomy to secure the airway.

Patient's recovery was uneventful and has remained asymptomatic one-year post excision of the tumour.

Key Words: Hypopharyngeal tumours, schwannoma, endoscopy

Introduction

Benign tumours of the hypopharynx tend to be rare. Common types of benign hypopharyngeal tumours include neurofibroma, hemangioma, lymphangioma and lipoma¹. A schwannoma of the hypopharynx is even rarer. Malignant lesions in the hypopharynx are more often written about.

Schwannoma is a benign schwann cell encapsulated tumour. Schwannomas tend to have no genetic predilection². These tumours can be mistaken for globus pharyngeus. This is because when they are very small their clinical features may be few as the hypopharynx is an expansile segment of the digestive tract. Some lesions in the hypopharynx have thus even been missed on fiberoptic esophagogastroscope. However, as these benign tumours enlarge they can cause dysphagia and obstruction of the upper airway

as a result of laryngeal blockage. Some patients have died from such benign tumours³. It is key that in the diagnosis of hypopharyngeal tumours there is a good complementary collaboration between otolaryngologists who are supposed to manage these patients and gastroenterologists who may chance upon these lesions in their diagnostic workup for dysphagia⁴.

We present a case of hypopharyngeal schwannoma which was causing acute upper airway obstruction and was completely excised in piecemeal via endoscopy.

Case Presentation

A 28-year-old man started experiencing the feeling of a mass in the throat for about 2 months. Progressively, he noticed that the mass was increasing in size. He thus reported to our Ear, Nose and Throat Clinic having been seen and referred from a hospital near him. He had dysphagia and odynophagia. He had no fever, chills, headache, cough or rhinorrhea. He also had no known allergies nor lost weight.

Flexible nasolaryngoscopy done showed a round soft tissue mass in the hypopharynx obscuring view of the larynx as shown in figure 1. A CT scan of the neck was also done as shown in figure 2, to have a three-dimensional view of the mass. This showed a well-

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defined pedunculated mass attached to the left lateral side of the hypopharynx with thick peripheral enhancement and non-enhancing central hypodensity suggestive of necrosis or hemorrhage. An impression of a hypopharyngeal tumour was made. The patient was then booked for elective tracheostomy and excision of the hypopharyngeal mass. As patient was being worked up for his scheduled surgery, he presented to the emergency unit of our hospital in severe respiratory distress. He thus had an emergency tracheostomy and the lesion excised via direct laryngoscopy/pharyngoscopy using a Chevalier Jackson laryngoscope. The findings were two round soft tissue masses attached to the left lateral wall of the hypopharynx. Vocal cords and supraglottic structures were intact. Endoscopic resection was done using a curved laryngeal scissors and electrocautery. The excised masses were as shown in figure 3. The samples were then sent for histology.

Histology showed an encapsulated spindle cell tumour with neural differentiation. The nuclei of the tumour cells were serpentine with tapered ends and were monomorphic. The tumour appeared to have hypercellular (Atoni A) and hypocellular (Atoni B) areas intimately associated with each other as shown in figure 4. No mitoses or malignancy was seen. The tumour showed diffuse intense positivity with S100 as shown in figure 5.

The patient recovered well, and one-year postoperative period was unremarkable.

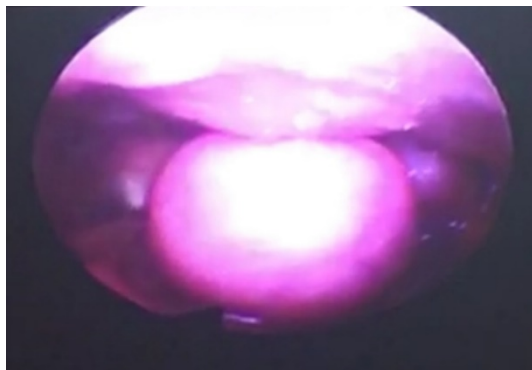


Figure 1: Hypopharyngeal mass as seen with a flexible nasolaryngoscope

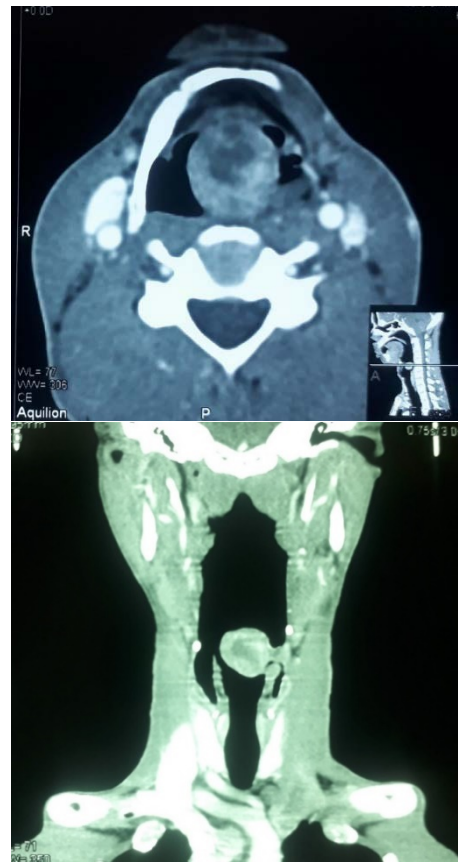


Figure 2: CT scans (axial and coronal views) showing the hypopharyngeal mass attached to the left lateral wall



Figure 3: Excised hypopharyngeal masses

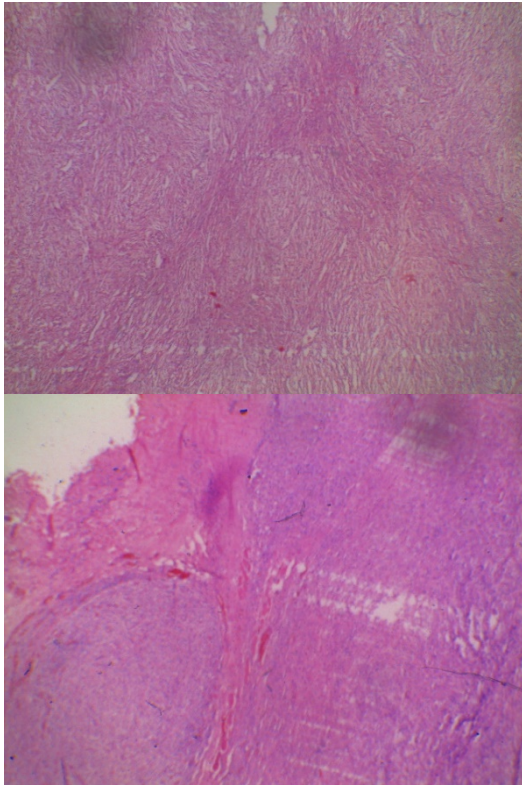


Figure 4: Micrograph of the tumour with H and E staining showing hypercellular and hypocellular areas.

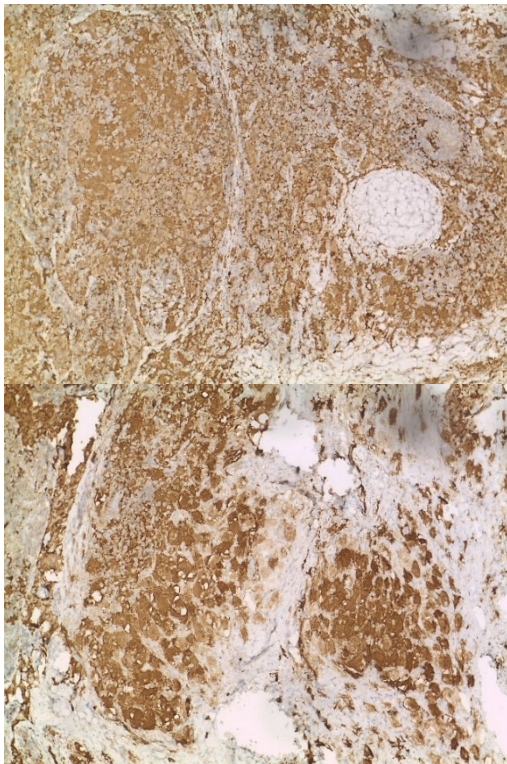


Figure 5: Micrograph of tumour showing S100 positivity of tumour cells in the hypercellular and hypocellular areas.

Discussion

Endoscopy and barium swallow have in the past been used for diagnosing these lesions. In recent times, MRI is preferable as it accurately diagnoses and allows for the origin of the pedunculated lesion in the parapharyngeal space to be clearly defined. CT scans can also be used for diagnosing schwannomas^{3, 5}. We used CT scan for our patient since that was the available imaging modality in our centre.

The diagnosis of hypopharyngeal schwannomas may be delayed and thus treatment may also be given at a later stage.

Histologically schwannomas are characterized by the presence of Antoni A and B and strong positivity for S100 protein without any mitotic activity. These differentiate the schwannomas from neurofibromas which tend to have a greater mitotic activity with a higher propensity of malignant transformation⁶.

The main treatment methods have been transoral endoscopic resection or lateral pharyngotomy with total excision of the tumour depending on the size of the tumour². We chose the endoscopic approach since the size of the tumour allowed adequate access and total resection of the tumour.

Recurrence of hypopharyngeal polypoid schwannomas are rare and malignant transformation is low³. One-year postoperative period had been unremarkable.

Conclusion

A high index of suspicion for a hypopharyngeal tumour especially schwannoma is needed when evaluating patients presenting with the feeling of a mass in the throat for early diagnosis and timely treatment.

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Consent

Informed consent was obtained from this patient for the publication of this article. A copy is available for inspection by the editor.

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