

## Transoral excision of retropharyngeal schwannoma: Case report

Chien Ying Vincent Ngu<sup>a</sup>, Chon Chean Gan<sup>a</sup> and Ing Ping Tang<sup>b,c</sup>

<sup>a</sup>Department of Otorhinolaryngology, Hospital Miri, Miri, Sarawak, Malaysia; <sup>b</sup>ORL Department, Faculty of Medicine, University Malaysia Sarawak, Sarawak, Malaysia; <sup>c</sup>Sarawak General Hospital, Sarawak, Malaysia

### ABSTRACT

Schwannoma is a benign nerve sheath tumor that arises from neural crest-derived Schwann cells. They are well-circumscribed and encapsulated tumor, commonly seen over the cervical region that involves the cervical and brachial plexus. However, the existence of this benign tumor in retropharyngeal space is infrequent. We report a case where a patient presented with incidental findings of retropharyngeal schwannoma, who is treated with trans-oral excision with tumor completely excised and patient recovered completely post-operative.

### ARTICLE HISTORY

Received 9 November 2016  
Accepted 2 March 2017

### KEYWORDS

Retropharyngeal; schwannoma; transoral excision

### Introduction

Schwannoma is a benign nerve sheath tumor that arises from neural crest-derived Schwann cells [1]. It is well-circumscribed and encapsulated tumor, commonly seen at age 20–70 years old in both genders [2]. It was reported 25–45% of the extracranial schwannoma found at head and neck region, most commonly involves the cervical and brachial plexus [2]. However, the existence in the retropharyngeal space is infrequent. Transcervical approach is used for complete en bloc removal of retropharyngeal tumor traditionally. However, neurogenic injury, unfavorable scars, loss of function, etc. are potential post-operative sequelae [3]. Here, we report a case whereby transoral excision was performed in a patient presented with retropharyngeal schwannoma, and patient has fully recovered.

### Case report

A 27-year-old gentleman with no known medical illness presented with signs and symptoms of allergic rhinitis. Other than nasal congestion, he had no complaint of globus sensation, dysphagia, odynophagia, voice changes, dyspnea or noisy breathing, the hallmark characteristics of retropharyngeal tumor. Clinical examinations also showed no hoarseness or stridor. Blood investigations were normal. However, after an indirect nasal and laryngeal endoscope was

performed, we noted retropharyngeal mass extending to the left pyriform fossa, obliterating 70% of the larynx. Initial provisional diagnosis was retropharyngeal retention cyst. Patient was arranged for emergency tracheostomy for airway protection in view of the retropharyngeal tumor was obstructing the upper airway. After airway has been secured, further investigations were performed.

Computed tomography scan of neck revealed a large prevertebral swelling at the level of C6, extending inferiorly to the left pyriform fossa and anterior epiglottic space, measuring 4.5 cm × 3.8 cm × 5 cm (see Figure 1).

The lesion was further confirmed with magnetic resonance imaging (MRI) which showed a well-encapsulated heterogeneously enhanced T1 hypointense and T2 hyperintense mass arising from the prevertebral space at the level of C3–C6, measuring 3.0 cm × 3.6 cm × 5.5 cm, almost completely obliterating the airway (see Figure 2).

After further investigation, patient was counseled for excision of tumor. In view of the center-seated retropharyngeal tumor, option of transoral excision was counseled to patient.

During operation, patient was put at supine position with neck extended. The retropharyngeal operation field was observed under direct laryngoscope with suspension. Incision was made over the mucosa of superior part of the retropharyngeal tumor via sickle knife until the margin was revealed. Then,