

FINE NEEDLE ASPIRATION CYTOLOGY OF AN UNUSUAL RETROPHARYNGEAL MASS

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ABSTRACT

We describe a case of long standing goiter with retropharyngeal space mass. FNAC established the diagnosis of retropharyngeal mass as extension of the goiter into the retropharyngeal space. Long standing large goiter usually grows downwards through the thoracic inlet. This case highlights the rare possibility of extension of the goiter into the retropharyngeal space and presenting clinically as retropharyngeal mass.

Key Words: Retropharyngeal mass, FNAC, Goiter

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INTRODUCTION

Retropharyngeal masses usually occur as a result of infections spreading into the retropharyngeal space either from the lateral pharyngeal space or through the lymphatics from cephalad sites like posterior sinuses, adenoids or the nasopharynx into the retropharyngeal lymph nodes. Neoplastic lesions can also present as masses of which squamous cell carcinoma is the commonest. Occasionally, however a long standing goiter can grow upwards into the retropharyngeal space. Retrovisceral or retropharyngeal space in the neck extends from the base of the skull to down to the level to the sixth cervical and the fourth thoracic vertebra the alar fascia fuses with visceral fascia, behind the pharynx is known as the retropharyngeal space and behind the esophagus it is the retroesophageal space.¹ We present one such case of a long standing goiter with retropharyngeal mass extending into the oropharynx.



Figure 1 : Intraoral examination showing large submucosal bulge in the posterior wall of Pharynx.

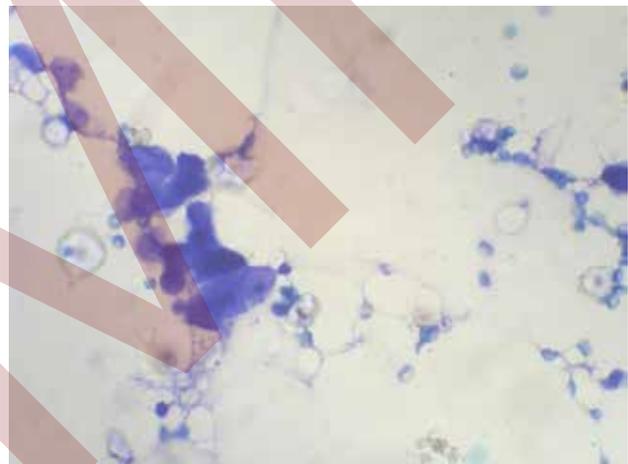


Figure 2 : FNAC smear from retropharyngeal mass showing follicular epithelial cells and thin colloid.

CASE REPORT

A 53 year old man with asymptomatic enlargement of the thyroid for the last thirty years presented to the ENT OPD with onset of difficulty in swallowing and coughs for the last four months gradually increasing in intensity. Intraoral mirror examination revealed a large oropharyngeal submucosal mass (Fig 1). The patient was referred for a fine needle aspiration of the oropharyngeal mass to know the nature of swelling. On fine needle aspiration of the submucosal oropharyngeal mass 4 ml of thin brownish coloured fluid was aspirated. Air-dried and wet-fixed smears were prepared for May-Grunwald Geimsa (MGG) and Papanicolaou stains. Microscopic examination revealed loose clusters of thyroid follicular cells lying against a background of abundant thin colloid.

Subsequently, CT scan was done and which showed a huge nonhomogenous thyroid mass involving all portions of the gland. There was extension of the mass into the mediastinum and extensive retrotracheal spread. Surgical extirpation of the thyroid mass was done subsequently

which histopathologically was a multinodular goiter. The retropharyngeal mass subsided after the surgery. The patient had an uneventful postoperative recovery.

DISCUSSION

Visceral spaces and compartments span the entire length of the neck and consist of loose connective tissue surrounding the thyroid gland, trachea and esophagus. There are two compartments, the anterior pretracheal space which surrounds the trachea and is located against the anterior wall of esophagus and the Posterior retrovisceral/retropharyngeal retroesophageal space. Between the larynx and the level of the inferior thyroid artery, the retrovisceral space freely extends around the sides of the esophagus and trachea into the anterior pretracheal space. The thyroid gland is situated in the pretracheal space. The thyroid gland usually grows outwards due to its anterior location in the neck. When there is a large goiter it usually grows downwards through the thoracic inlet, sometimes causing the 'thyroid cork' phenomenon of the inlet. The downward extension have been reported in a number of studies and extension into the mediastinum, usually into the anterior mediastinum which is the cause of compressive symptoms.² However the upward extension of the goiter into the retropharyngeal space is rare and it is especially unusual to have the extension upto the oropharyngeal level. Few cases of such goitrous enlargement have been reported.^{3,4,5,6} This upward extension is usually a late phenomena occurring in those cases where the neck mass is not detected, usually obese patients or in those who have medically neglected themselves for years. Below the level of the inferior thyroid artery, the pretracheal space is separated by fascia from the retrovisceral space continues caudally into the thorax which blends with fibrous pericardium. Thus, when one considers the totality of the visceral space, it is clear how a thyroid mass in the pretracheal space can grow into the retroesophageal and then the retropharyngeal spaces, since in reality, they are all one space.⁷

This case is presented to highlight the rare possibility of extension of the goiter into the retropharyngeal space and presenting clinically as retropharyngeal mass and occasionally extending in to the oropharynx. This is the only case of thyroid gland swelling also presented as large retropharyngeal mass in at our institute during last 20 years in which FNAC was performed. Majority of these patients also have large mediastinal component, a common mode of goiter extension, which is the cause of respiratory distress. In differential diagnoses of the retropharyngeal mass, possibility of extension of goiter should also be considered.

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