

## Thymic Cyst: A Rare Etiology of Cervical Mass in Adults

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### Abstract

### Case Report

The thymic cyst is a rare congenital tumor. Usually asymptomatic, this tumor is generally seen in childhood under the age of ten. In the neck, the preoperative diagnosis of this tumor is difficult and is rarely made. The treatment of choice is surgical excision. The long-term prognosis is excellent with a low rate of local recurrence. We report a case of cervical thymic cysts in adult patient.

**Keywords:** thymic congenital tumor cervical etiology.

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## INTRODUCTION

Thymic cysts are rare congenital tumors, presenting 1% of the cystic cervical masses of childhood and extremely rare in adulthood. We report the case of a male adult who had a left lateral cervical mass for 3 months.

## CASE REPORT

A 28-years-old patient with no past medical history, who has had a left lateral mobile mass of 7cm with a cervical discomfort for three months. There was no dyspnea, dysphagia, dysphonia or alteration of the general condition. Clinical examination finds a mass with normal appearing skin over. On palpation, this mass was of 7cm in diameter, well defined, mobile, elastic, painless and immobile with swallowing. In addition, there was no thrill or noise on auscultation. The thyroid compartment was free as well as the cervical ganglionic areas. The otolaryngology examination was without abnormalities. The rest of the somatic examination showed nothing special. A cervical computed tomographic (CT) scan was done showing a median cervical hypodense mass in contact with the supra aortic trunks pushing the sternocleidomastoid muscle laterally and compressing the thyroid gland. In addition, a cervical magnetic resonance imaging (MRI) shows multi lobes fluid collections notably at the upper pole of this mass (figure1.2.3).



Fig-1: Axial section MRI T1 cervico-thoracic



Fig-2: coronal section MRI T2 cervico-thoracic

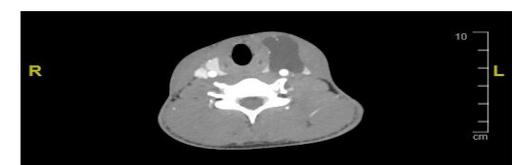


Fig-3: Axial section of the injected cervico-thoracic scanner

A surgical excision with safe margins and neighboring lymphadenectomy has been done thereafter and sent to the pathology laboratory that confirmed the diagnosis of thymic cyst with inflammatory changes with subacute and chronic nonspecific lymphadenitis in lymphadenopathy.

## DISCUSSION

The thymic cyst is a rare congenital tumor (3 to 5% located in the anterior mediastinum) [1, 2]. It usually affects children aged 4 to 7 years with a slight male predominance.

The pathogenesis is explained either by a defect of thymic migration during organogenesis or by a cystic degeneration of thymic residues even with a normal thymus migration. The thymic migration during organogenesis explains the cervicothoracic topography of these cysts and the diversity of clinical presentations. Thymic cervicothoracic cysts (KTCT) are generally asymptomatic (90%) or sometimes can be symptomatic due to their mechanical compression complications (approximately 39% of cases) [3, 4]. there is no specific biological marker.

Doppler ultrasound is a non-invasive investigation that can be the first line investigation to determine the consistency of the tumor and its anatomical relationship to the other neighboring organs and tissues. A contrast enhanced CT scan can also help in providing other supplementary information such as the extensions of this tumor [5-7].

Moreover, the MRI is a high-performance radiological method that can help in identifying the origin of the cyst but it should not be done as a first method of diagnosis. Fine needle aspiration is not recommended as its sensitivity and specificity are low [5, 8]. However, the definitive diagnosis is acquired by the surgical excision where rock water liquid or a chocolate colored liquid if hemorrhagic can be seen macroscopically. Then followed by a histopathological examination that shows a single or multilocular tissue filled with a clear to black fluid with necrotic debris and cholesterol crystals sometimes. The presence of Hassall corpuscles is pathognomonic. The existence of parathyroid tissue is rare but has been reported too which is explained by the ability of thymic cells to differentiate into parathyroid cells.

Surgical treatment remains the treatment of choice for these tumors. The prognosis of this pathological entity is excellent with a very low risk of local recurrence [11-15].

## CONCLUSION

The thymic cyst is a rare etiology of the lateral cervical masses and often misdiagnosed. Surgical excision with microscopic examination is the method to confirm the diagnosis. Finally, the definitive treatment is surgical with low recurrence rate.

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