

Giant Thyroid Cyst Mimicking Cervical Cellulitis

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Abstract

Case Report

Cystic lesions of the thyroid are a well-recognized disease of the thyroid gland, but thyroid Cyst leading to compressive symptoms is rare. The authors report herein on a case of giant thyroid cyst, mimicking a diffuse cervical cellulitis; in a 62-year-old female with 4-year history of gradually enlarged neck mass, increasing in size over the last few days associated with intense neck pain and dysphagia. Computed tomography revealed a giant cyst in the left thyroid lobe. Left isthmolobectomy was performed after intraoperative cyst puncture. Histopathologic analysis of the specimen confirmed a benign thyroid cyst.

Keywords: Giant goiter; Cyst, Infection, Thyroid; Fine-needle aspiration, surgery.

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INTRODUCTION

Thyroid cyst is a common problem seen by clinicians. Most cystic lesions of the thyroid are considered to be caused by hemorrhage and subsequent degeneration of preexisting nodules. At sonography, 15–25% of solitary thyroid nodules are found to be cystic or predominantly cystic [1,2]. Therapy is surgical, especially if compressive symptoms are present. Fine needle aspiration biopsy and sclerotherapy which are an alternative to surgery represent a safe and effective therapeutic tool for the treatment of thyroid cysts. We report an unusual case of superinfection of the thyroid cyst mimicking cervical cellulitis and discuss the epidemiology, clinical features, differential diagnosis and treatment of this disease, in the light of a case report.

CASE REPORT

A 62-year-old female presented to the otorhinolaryngology department with a 4-year history of gradually enlarged neck swelling. The patient described that the mass had increased in size over the last month, and had become red, and painful, associated with dysphagia and dyspnea.

On presentation, the patient was febrile to 39°C with intense neck pain, tachycardia, dysphagia and dyspnea without respiratory distress. Examination of the neck founded a diffuse cervical mass, poorly circumscribed, measuring 12 cm long axis, extending

up to the submandibular region, erythematous, tender, warm and very painful on palpation (Fig.1). No cervical lymphadenopathy was found. Pharyngolaryngeal flexible endoscopy was normal. She had a biological inflammatory and infectious syndromes with C-reactive protein (CRP) levels of 100 mg/L and hyperleukocytosis at 17 200/ μ L. Her thyroid function test was normal.

Computed tomography (CT) scan of neck and thorax revealed a 13 cm x 8 cm giant cyst in the left thyroid lobe, which appeared to be unilocular, that extended superiorly to the submandibular region, inferiorly to the clavicular head, and medially to the isthmus (Figure B). The tight carotid sheath was displaced laterally and an important mass effect was evident on the larynx and trachea.

Considering the size of the tumor and the suspicion of airway obstruction, left isthmolobectomy was performed after intraoperative cyst puncture containing 1000 ml of citrine serous fluid, which, on bacteriological examination and microbial culture did not reveal any acid-fast bacilli. Histopathologic analysis of the specimen confirmed a benign thyroid cyst. The postoperative course was uneventful and no recurrence has been observed with a follow-up of 16 months.



Fig-1: Physical examination revealed a large painless cervical mass.



Fig-2: Computed tomography scan of the neck and chest, axial view (A) and coronal view (B), demonstrating a giant cystic in the left thyroid lobe causing laryngeal and tracheal deviation.

DISCUSSION

Thyroid cysts represent enlarged fluid-filled regions of the thyroid that may be small (less than 1 cm) or quite large and sometimes arise very suddenly. At sonography, 15–25% of solitary thyroid nodules are found to be cystic or predominantly cystic [1,2]. These thyroid lesions include true or simple thyroid cysts, which are almost routinely benign and thyroid cysts which are more complex and contain both solid and fluid components, called: complex cysts, mixed echogenic nodules, and much more. There often are no associated symptoms other than the recognition of a new "masse" noted incidentally on palpation or noticed by another individual.

The differential diagnosis of a mass in the neck includes inflammatory, congenital, and tumoral etiologies. Fever, the size of the mass, inflammatory mass, intense neck pain, laboratory signs of inflammation and infection are suggestive of the suspicion of neck suppuration, which constitutes a surgical emergency [3]. but the absence of subcutaneous crepitation, an identified portal of entry as well as the local progression over one month are not in favour of an infectious etiology. However, in a tuberculosis-endemic country as our, we could not formally eliminate the diagnosis of tuberculous abscess in the context of cervical tuberculous lymphadenitis [4,5].

In view of the concept of a neck mass present for 4 years, increasing in size for a last month with airway obstruction, another possibility was thyroid compressive cancer or a thyroid hemorrhagic cyst [6]. Finally, anterior cervical mass with the ability to evolve in an inflammatory or infectious mode must raise the suspicion of 2nd, 3rd and 4th branchial cleft cyst which typically presents as a recurrent cervical abscess or are misdiagnosed as acute suppurative thyroiditis [7].

Acute deterioration of the clinical features could be explained by bacterial superinfection of the of thyroid cyst. Head and neck CT scan performed urgently confirmed the hypothesis of thyroid cyst (Fig. 2). Because the cyst is large and obstructive symptoms are present, a diagnostic isthmolobectomy was the appropriate diagnostic procedure. The final diagnosis of benign thyroid cyst was confirmed by histopathologic analysis.

CONCLUSION

Thyroid cyst is a rare cause of compressive goiter requiring a high clinical suspicion. Clinicians should be aware of the importance of to differentiate this condition from other thyroid disorders, especially malignant lesions. Surgery is indicated for patients with compressive symptoms, suspicious.

Current methods (fine needle aspiration biopsy, thyroid suppression therapy, and sclerotherapy) may allow for specific, minimally invasive diagnosis and represent safe and effective management options [8,9].

CONFLICTS OF INTEREST

The authors declare that they have no competing interests.

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