IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 15, Issue 4 Ver. VII (Apr. 2016), PP 05-07
www.iosrjournals.org

A Rare Case Of Dermoid Cyst Presenting As A Thyroid Swelling - A Case Report.

Dr. Korumilli Ramesh Kumar[1], Dr. M. Siddartha Reddy[2],
Dr. D. Murali Krishna[3], Dr. P. Phani Teja[4], Dr. T. Aditya[5].
[1](*Professor and HOD, General Surgery, SVS Medical College,Dr NTR University of Heath Sciences, INDIA)*
[2, 3,4,5](*Post-Graduates of General Surgery, SVS Medical College,Dr NTR University of Heath Sciences, INDIA)*

Abstract: *Dermoid cysts though are the most common teratomatous lesions, are infrequently seen in head and neck region. Very rarely seen in thyrohyoid region, masquerading as a thyroid nodule. Here we describe a case of 17 year old female presenting with a lateral neck mass since 1 year associated with the thyroid gland which was later excised and found out to be dermoid cyst.*
Keywords: *Dermoid cyst, Lateral neck mass, Thyroid.*

I. Introduction

Dermoids are teratomatous lesions comprised of both ectodermal and mesodermal elements, including epithelium and adnexal structures, such as hair follicles and sebaceous glands .Only 7% of the dermoid cysts arises in the head and neck region. In the neck region they are typically seen in the midline in the floor of the mouth or submandibular region. Dermoid cysts seen in the thyrohyoid region are exceedingly rare. Here we report a case of a 17 year old female with a slow growing swelling over left side of the neck, presenting clinically as a thyroid nodule. On surgical excision, the patient was found to have a cystic mass adherent to the thyroid gland. Histologic analysis confirmed a diagnosis of dermoid cyst.

II. Case Report

A 17 year old female presented to the surgical outpatient department with a complaint of swelling on the left side of neck of one year duration which gradually progressed to the present size. No history of trauma. No history of pain/fever. No history suggestive of compressive symptoms or hyperthyroid or hypothyroid features. Menstrual history was normal. No history of usage of any drugs in the past and no history of similar swellings in family.

On examination a single 6X5cms oval shaped smooth swelling with regular margins on the left side of the neck, moving upwards on deglutition, cystic in consistency, not mobile horizontally. Trachea was mid line in postion and carotid artery pulsation felt in normal position.

Fig.1 Clinical photograph showing swelling over left side of neck

Real time ultra sound demonstrated a hypoechoic, avascular mass measuring 5 cms and cystic with no posterior rim enhancement. She underwent ultrasound guided FNAC but it was inconclusive even after repetition. Thyroid profile was normal.

Surgery was planned and during dissection a thin walled cystic mass was encountered over the left lobe of thyroid measuring approximately 5x5 cm. The mass was carefully dissected from the neighbouring structures. There were adhesions between the thyroid and the cystic mass which were carefully dissected out. The mass was completely removed and sent for pathological analysis

.

Fig.2 Intraoperative photograph showing mass.

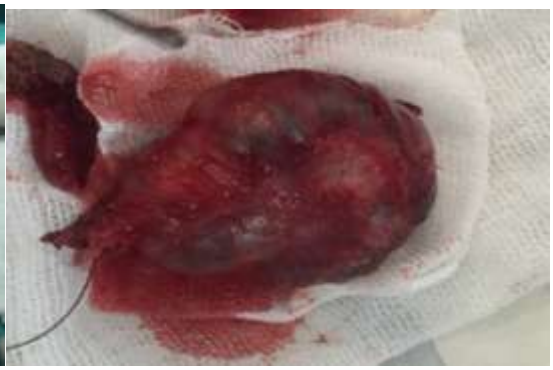

Fig.3 Excised specimen.

Postoperative recovery was uneventful. Histopathology reported as Dermoid cyst with description of the cyst lining comprising of stratified squamous epithelium variably hyperkeratotic, with abundant, centrally desquamated keratin debris. Cyst wall also consists of developing hair follicles and abundant sebaceous glands. No signs of recurrence for one year follow up.

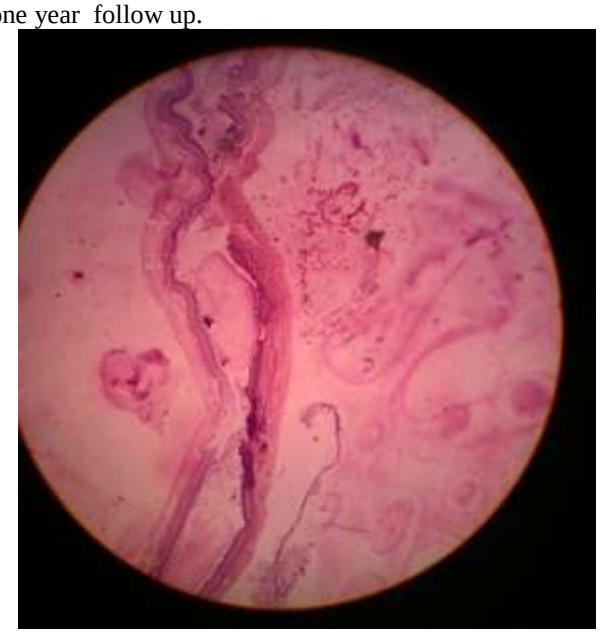

Fig.4 Histopathological picture showing cartilage, epithelial lining and adipose tissue

III. Discussion

Usually congenital dermoid cysts arise due to an embryological accident during early stages of development between 3rd and 5th weeks of gestation. The cause of dermoid cyst is the failure of surface ectoderm to separate from underlying structures, resulting in sequestration of surface ectoderm. Dermoids and epidermoids are ectoderm lined inclusion cysts that differ in complexity. Epidermoid cysts have only squamous epithelium; dermoids contain hair, sebaceous and sweat glands, and squamous epithelium.[1]

The presence of skin appendages within the wall of the dermoid cyst and the absence of these features in the epidermoid cyst is the basic difference between these two. A teratoid cyst may also contain tissue of other major organsystems (e.g., nervous, gastrointestinal, respiratory). Because of the squamous epithelium lining, all three of these cysts may have cheesy keratinaceous material within the lumen.[2,3,4].

Dermoid and epidermoid cysts are developmental pathologies that occur in the head and neck with an incidence of 6.9-7% [5, 6]

The most common clinical appearance of a dermoid cyst in the neck is a midline, suprahyoid, slowly growing mass, enlarging over years or decades, by the accumulation (within enclosed space) of cutaneous products [2,3, 7].

Ultrasonographic features include solid and cystic structures within a heterogeneous mass, and calcifications are seen more frequently than cartilage and bone formation [4].

Dermoid cysts are treated by surgical removal. Those that are supramylohyoid require introral incisions, whereas inframylohyoid type require an extaoral approach. Recurrence is uncommon with both types.[8]

IV. Conclusion

This is a rare case of dermoid cyst present in the neck to the left of mid-line in the thyroid region, mimicking as a thyroid swelling. Ultra sound demonstrated a hypoechoic, avascular mass measuring 5 cms and cystic with no posterior rim enhancement. FNAC was also not conclusive, only during surgical procedure it was evident that it was not arising from thyroid, but there were adhesions present.

The whole cyst was completely excised and histopathology confirmed as dermoid cyst.

References

[1]. Smirniotopoulos JG, Chiechi. MV. Teratomas, dermoids and epidermoids of head and neck. Radiographics 1995;15:1437

[2]. Koeller K.K., Alamo L., Adair C.F., and Smirniotopoulos J.G. Congenital Cystic Masses of the Neck: Radiologic-Pathologic Correlation. Radiographics. 1999; 19:121-146.

[3]. Meuwly J, Lepori D, Theumann N, Schnyder P, Etechami G, Hohlfeld J, Gudinchet F. Multimodality Imaging Evaluation of the Pediatric Neck: Techniques and Spectrum of Findings. RadioGraphics 2005; 25:931-948.

[4]. Hunter T, Paplanus S, Chernin M, Coulthard S. Dermoid cyst of the floor of the mouth: CT appearance. AJR 1983;141:1239-1240.

[5]. Dimov Zh, Dimov K, Kr'stev N, Kr'stev D, Baeva M, Baeva N, Yar'mov N. Dermoid, epidermoid and teratoma cysts of the tongue and oral cavity floor. Khirurgiia (Sofiia)2000; 56(2):30-2.

[6]. Saverio D.P.F., Alessandra B., Emanuele M., Johan B.D.Sublingual Epidermoid Cyst. Journal of Craniofacial Surgery. 13(2):308-310, March/April 2002.

[7]. Som P. Cystic lesions of the neck. Postgrad Radiol 1987;7:211-236.

[8]. Devine JC, Jones DC. Carcinomatous transformation of a sublingual dermoid cyst. A case report. Int J Oral Maxillofac Surg 2000;29(2):126-127.