

Thyroid epidermal cysts in a developing community

Abstract

The epidermal cyst is a benign lesion that typically exhibits encircling squamous epithelium, the contents being keratinous debris. While being commonest in the skin, it is rarely reported in the thyroid gland. Usually, a single entity is reported. Therefore, this paper reports 3 cases from a histopathology data pool serving the Ibo/Igbo ethnic group domiciled in a developing community. It is usually misdiagnosed until biopsy confirms the nature of the lesion.

Keywords: thyroid, swelling, biopsy, cyst, squamous lining, keratinous contents

Special Issue - 2018

Wilson IB Onuigbo

Department of Pathology, Medical Foundation and Clinic, Nigeria

Correspondence: Wilson IB Onuigbo, Department of Pathology, Medical Foundation and Clinic, 8 Nsukka Lane, Enugu 400001, Nigeria, Email wilson.onuigbo@gmail.com

Received: May 19, 2017 | **Published:** November 26, 2018

Introduction

The epidermoid cyst is a benign lesion which characteristically consists of a cyst lined by squamous epithelium and contains keratinous debris.¹ With regard to the thyroid gland, it is usually not diagnosed until biopsy is undertaken.²⁻⁷ Therefore, this paper presents 3 cases found by means of the establishment of a histopathology data pool as was recommended by a Birmingham (UK) group,⁸ the ethnic group concerned being the Ibos/Igbos who are domiciled in South-eastern Nigeria.⁹

Investigation

The Laboratory Request Form was made available to the local practitioners. They were encouraged to send specimens in adequate formol-saline and adequate data, consisting of name, age, sex, complaints, duration, examinations, biopsy, doctor and provisional diagnosis. The stored reports were scrutinized strictly and documented

duly so as to obtain the data for epidemiological analysis (Table 1) (Figure 1).

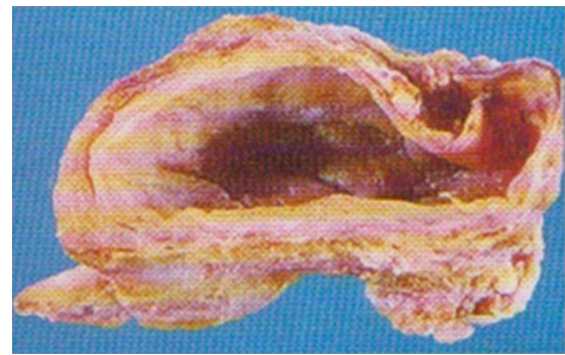


Figure 1 Typical thyroid cyst.

Table 1 Epidemiologic details

| S/No. | Lab No. | Initials | Sex | Age (yr) | Duration (yr) | Diagnosis | Cyst content |
|-------|----------|----------|-----|----------|---------------|------------------|--------------|
| 1 | 961269 | KN | F | 28 | 7 | Thyroid nodule | Smelly |
| 2 | H 113/03 | IC | M | 5 | 3 | Aberrant thyroid | Friable |
| 3 | H 204/07 | OO | M | 4 | 3 | Ectopic thyroid | Murky |

What stands out in the Table above is that the younger elements were males. This is in keeping with their preference among local mothers.⁹ Likewise, the female attended quite old probably because of the tendency of this sex to worry increasingly about one's appearance as years roll by Batten AJ¹⁰

Discussion

In this community, vulvae epidermis cysts first attracted attention as an aftermath of the deplored female circumcision.¹¹ A curious outcome of this practice was the formation of vaginal stone.¹² Another presentation was the ophthalmological one.¹³

Now that the thyroid relationship has been presented above, was comparison noted with the literature cases? Certainly, ultrasound was undertaken in Case 2 but it was reported as "aberrant thyroid." Thus, as in the Netherland's case,² ultrasound guided cytological analysis was inconclusive. Likewise, in the USA case,³ son graphic examination ran thus: "The appearance of the lesion was atypical with

a faint, crescent, slightly hyper echoic anterior surface, not acrogenic enough to suggest calcification, and with deep posterior acoustic attenuation, making it impossible to evaluate the internal structure."

In the Indian case,⁴ in which "Careful preoperative imaging and fine needle aspiration suggested the non-thyroid origin of the mass," it was "complete surgical excision of the mass (that) revealed the final pathology as an epidermal inclusion cyst." This particular conclusion was my local experience.

Conclusion

Long ago, Strome & Eraklis¹⁴ made the point that cysts in the neck may be of thymic origin. As they stressed, "heightened awareness of this clinical entity should enable preservation of the normal thymus gland." As it turned out, none of the present specimens contained thymic tissue. Likewise, it is to be noted that the specimen was not that of a thyro-glossal cyst, which is regarded as the most common cause of midline neck masses.^{15,16}

Acknowledgments

None.

Conflicts of interest

Author declares that there is no conflicts of interest.

References

1. Rosai J. Ackerman's surgical pathology. *Anne S Patterson*. 8th ed. Baltimore: Mosby; 1995. p. 2623.
2. Fleskens S, Scheltinga MR. An infected midline epidermal inclusion cyst. *Otolaryngol Head and Neck Surg*. 2007;137(2):346–347.
3. Bekele W, Gerscovich EO, Naderi S, et al. Sonography of an epidermoid inclusion cyst of the thyroid gland. *J Ultrasound Med*. 2012;31(1):128–129.
4. Kannan S, Akila L, Kuppuswamy M, et al. Epidermal inclusion cyst in the neck masquerading as a thyroid neoplasm. *Thyroid Res Pract*. 2015;12(1):32–34.
5. Kuduban O. Epidermal inclusion cyst of thyroid gland. *Eurasian J Med*. 2015;47(1):78.
6. Choure DD, Nichat PD, Agarwal S, et al. Epidermal cyst presenting as a solitary thyroid nodule: A rare case report. *J Med Sci Clin Res*. 2015;3(8).
7. Kulkarni SS, Vyas AS. Thyroid epidermal cyst - A common cyst, rare site. *Natl J Med Res*. 2016;6(3):290–291.
8. Macartney JC, Rollaston TP, Codling BW. Use of a histopathology data pool for epidemiological analysis. *J Clin Pathol*. 1980;33(4):351–355.
9. Basden GT. Niger Ibos. Cass, London; 1966.
10. Batten AJ. Neither gold nor braided hair: adornment gender and honour in antiquity. *N Test Stud*. 2009;55(4):484–501.
11. Onuigbo WIB. Vulval epidermoid cysts in the Igbos of Nigeria. *Arch Dermatol*. 1976;112(10):1405–1406.
12. Onuigbo WIB, Twomey D. Primary vaginal stone associated with circumcision. *Obstet Gynecol*. 1974;44:769–770.
13. Onuigbo WIB, Ezegwui IR. Ophthalmic presentation of epidermoid cysts in an African community. *Int Ophthalmol*. 2001;24(5):279–281.
14. Strome M, Eraklis A. Thymic cysts in the neck. *Laryngoscope*. 1977;87(10 Pt 1):1645–1649.
15. Deaver MJ, Silman EF, Lotfipour S. Infected thyroglossal duct cyst. *West J Emerg Med*. 2009;10(3):205.
16. Thabet H, Gaafar A, Nour Y. Thyroglossal duct cyst: Variable presentation. *Egypt J Ear, Nose, Throat Allied Sci*. 2011;12(1):13–20.