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

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).

<table>
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<th>S/No.</th>
<th>Lab No.</th>
<th>Initials</th>
<th>Sex</th>
<th>Age (yr)</th>
<th>Duration (yr)</th>
<th>Diagnosis</th>
<th>Cyst Content</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>961269</td>
<td>KN</td>
<td>F</td>
<td>28</td>
<td>7</td>
<td>Thyroid nodule</td>
<td>Smelly</td>
</tr>
<tr>
<td>2</td>
<td>H 113/03</td>
<td>IC</td>
<td>M</td>
<td>5</td>
<td>3</td>
<td>Aberrant thyroid</td>
<td>Friable</td>
</tr>
<tr>
<td>3</td>
<td>H 204/07</td>
<td>OO</td>
<td>M</td>
<td>4</td>
<td>3</td>
<td>Ectopic thyroid</td>
<td>Murky</td>
</tr>
</tbody>
</table>

Discussion
In this community, vulval epidermoid 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], sonographic examination ran thus: “The appearance of the lesion was atypical with a faint, crescentic, slightly hyper echoic anterior surface, not echogenic 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 & EraKlis [14] 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].

Conflict of Interest

None.

Acknowledgement

None.

References