

Epidermoid Cysts of the Chest Wall in a Developing Community

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Abstract

The epidermoid cyst is a characteristically benign lesion lined by squamous epithelium and filled with keratinous debris, while a similar cyst, qualified as sebaceous, is lined by sebaceous glands. In the present series, the focus of attention is on the epidermoid cyst of the chest wall. Of the 14 patients, whose lesions were biopsied by clinicians, the materials had to be submitted in formal-saline containers. The necessary request forms bore such epidemiological details as age, sex, size of the lesion and the clinical diagnosis. A striking finding was that the diagnoses were of *sebaceous* rather than *epidermoid* cysts. Therefore, it is recommended that this is worthy of world-wide research, seeing that Birmingham (UK) authors' paper suggested that a histopathology data pool, such as the present local one, promotes epidemiological analysis. Perhaps, the solution is to consider that epidermoid cyst contains watery keratinous flakes while the sebaceous cyst contains dense fatty matter!

Keywords: Skin; Chest wall; Epidermoid cyst; Sebaceous cyst; Differential diagnosis; Developing community

Introduction

Rosai's Ackerman's tome defines "epidermoid cyst" as "a benign lesion which characteristically consists of a cyst lined by squamous epithelium and contains keratinous debris," whereas "sebaceous cyst" is lined by sebaceous glands [1]. It is generally seen in the skin. The author's local experience among the Igbos [2], who are domiciled in the South-Eastern Region of Nigeria, is its involvement of the vulva [3].

Literature search was undertaken personally as regards the chest wall. There was the report from Turkey [4] in which the chest wall example was with reference to the ribs. Indeed, what was of interest was that a tiny epidermal cyst could present as in-situ carcinoma in India [5]. Leonardi and Neptune [6] wrote from USA as regards surgical management of chest wall tumors in general. Therefore, this paper considers the chest wall in general with reference to the Igbos living in a developing community in Nigeria.

Materials and Methods

A Birmingham (UK) group proposed that the establishment of a histopathology data pool aids in epidemiological analysis [7]. Accordingly, since such a data pool was established by the Government of the Eastern Region of Nigeria, it has provided here an avenue for analyzing the cases of epidermoid cysts received in the Reference Regional Pathology Laboratory from 1970 to 2007. The clinicians were encouraged to biopsy specimens in their various hospitals and to dispatch them to the author in formal-saline containers, provided that they used Request Forms for supplying such epidemiological data as age, sex, size of specimen, and clinical diagnosis.

Results

Curiously, the peak age groups were 21-30 years for males and 51-60 years for females. Males preponderated in the ratio of 4/3.

The commonest provisional diagnosis was sebaceous cyst (8 times) as compared with the single epidermoid cyst. Most cases measured up to 2.5 cm across, while the largest measured fully 10 cm.

Discussion

Surgical management of chest wall tumors has long been of interest [7]. From Korea [8], the wide view was as follows: "Neoplasms and tumor like lesions that originate from chest wall tissues are uncommon compared with tumors in other parts of the body, and unfamiliarity with these disease entities can cause diagnostic difficulties for radiologists." Incidentally, the frontal chest radiograph in India yielded mediastinal widening, but, following surgery and histopathology, it turned out to be an epidermal cyst [9].

However, for the sake of completeness, the lesions portrayed in this study ought to be subjected to comparison. In this context, Winston Evans [10] avowed that, when fully developed, epidermoid cysts may measure over 3 cm, whereas 10 cm was attained in this series. Incidentally, the author's earlier study of local epidermoid cysts dealt with a body-wide search; two chest wall epidermoid cysts were recorded; and both were erroneously diagnosed as sebaceous cysts [3]. The question arises, therefore, as to how to clinically

S/No.	Sex	Age	Size (cm)	Clinical diagnosis
1	M	21	2	Cyst
2	M	34	10	Sebaceous cyst
3	F	44	2	Cyst
4	F	5	1.5	Lymph node
5	M	56	3	Sebaceous cyst
6	M	28	2.5	Sebaceous cyst
7	M	40	1.5	Fibroangioma
8	F	21	2.5	Cyst
9	M	27	4	Sebaceous cyst
10	M	33	4	Sebaceous cyst
11	F	53	1.5	Epidermoid cyst
12	M	18	2.5	Sebaceous cyst
13	F	60	3	Sebaceous cyst
14	F	51	2.5	Sebaceous cyst

Table 1: Epidemiological data on epidermoid cyst of the chest wall among the Igbos.

Age	Male	Female	Total
< 20	1	1	2
21-30	3	1	4
31-40	3	-	3
41-50	-	1	1
51-60	1	3	4
Total	8	6	14

Table 2: Distribution in age groups.

differentiate between them. I am persuaded that awareness of the problem is one thing. Another thing is to compare their tensions. Perhaps, there may be differences between the watery "keratinous" flakes of the epidermoid cyst as compared with the densely fatty "sebaceous" contents of the well named sebaceous cyst!

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