Early Case of Mammary Adenoid Cystic Carcinoma Described in 1881

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Abstract

During the 1846-1848 era, an elite Society of Pathologists sprang up in London. Anonymously, it declared its mandate as the enhancement of the profession. As fate would have it, having amassed photocopies of their Transactions, even the first volume was found to contain an early example of what is now known to be a good evidence of cancer to cancer metastasis. Therefore, the present paper draws attention to another early perception, namely, mammary adenoid cystic carcinoma in 1881.

Keywords: Cancer; Cysts; Breast; History

Introduction

The elite Pathological Society of London emerged during the 1846-1848 era with the bold view of enhancing the profession [1]. Their publication called Transactions came on the scene fruitfully. I like best the fact that the first volume contained the story of a patient whose eye melanoma was associated with spread into a renal carcinoma. In sum, the colour differences indicated cancer to cancer metastasis [2]. This example was duly published personally in The New Zealand Medical Journal [3]. Therefore, the present paper duly directs attention to a massive report on cystic cancer of the breast in 1881 [4].

Historical Text

It merits abridgements selectively thus

The tumour was removed from the breast of an unmarried woman, 40 years of age. It had grown rapidly, having only taken six months to attain a size three or four times as great as the opposite one; in other respects it was in no way remarkable-smooth, conical, soft and uniform, with skin and nipple quite natural, except for some enlarged veins.

After removal, the tumour presented on section no trace of normal breast structure, it seemed to consist of nothing but a mass of fibrous tissue studded in every direction with minute cysts, the largest as big as a pea, spherical, with a distinct lining membrane and containing a clear gelatinous fluid, sometimes stained green or brown. There was no trace of intracystic growth. Here and there the cysts were grouped together more closely than elsewhere, but that was the only trace of arrangement; and sometimes, between them could be seen triangular patches of softening (?) mucous in the fibrous tissue. The minute structure, and especially the way in which the change arose, were best seen in some outlying lobules dissected away subsequently.

Sections made through these, after hardening, showed that the change was not limited to any one point but commenced in many scattered places simultaneously.

The established practice of the Society was to allow The Morbid Growths Committee to look into a challenging Report. See how they proceeded thus:

We have examined sections of Mr. Moullin's specimen, and can confirm his observations on the cysts with epithelial lining and clearly-defined and thickened membrana propria; also, that the substance between the cysts is almost entirely fibrous tissue. But we have not succeeded in tracing the process by which he believes the cysts and fibrous tissue to have been formed. Indeed, we are inclined to regard the changes as essentially of the lining membrane and epithelium of the ducts and acini of the gland. We do, indeed, see collections of cells, such as the reporter (Mr. Moullin) describes, which are apparently outside the ducts. But, after a close examination, we have convinced ourselves that these are but sections of ducts which are completely full of altered epithelium. We think, therefore, that the disease is really ill-
developed carcinoma; first, on account of the great thickening of the membrana propria and the alteration in the character of the epithelium, together with well-marked signs of cell proliferation; while the adjacent fibrous tissue exhibits scarcely any signs of activity. Secondly, because many of the smaller sacs are filled, or almost filled, rather than lined, with epithelium, and there are appearances which indicate endogenous cell formation. Our view is strengthened by the age of the patient and the diffuse character and rapid progress of the tumour.

Discussion

Nowadays, adenoid cystic carcinoma has gained prominence as regards the breast. What has struck me most has been the wide variety of the cystic structures displayed in the past articles. For example, Anthony & James [5] published diverse illustrations. In particular, the old US Armed Forces Institute of Pathology Atlas supplied two such variations [6]. Interestingly, another US work contained as many as 8 Figures [7].

To conclude, there is enough evidence that the 1881 text contained the descriptions which were those of this basically cystic malignant tumor. It may be added that there are recent advances concerning this carcinoma as regards “an overview of clinical, histopathological and molecular genetic features [8].

Moreover, recognizing it is acknowledged to be “important to avoid delay in diagnosis because this tumor has a good prognosis with rare metastases to axillary lymph nodes”[9].

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