

Follicular Thyroid Carcinoma Spreading to the Femur in a Developing Community

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Abstract

The peculiar colloid appearance of thyroid carcinoma helps in the diagnosis of its metastases. Now, this was helpful in comparing its skull metastasis among the Japanese and the Igbos, who live in a developing community in South Eastern Nigeria. Therefore, this paper considers 3 cases of thyroid metastases in the femur of Igbo women. This appears to be uncommon as regards worldwide experiences.

Keywords: Thyroid; Cancer; Metastases; Femur; Women; Nigeria

was described as “This is thyroid gland per se.” Thus, the diagnosis was simply metastasizing thyroid carcinoma.

Introduction

The thyroid gland is endowed with a distinguishing colloid appearance. This has been helpful in epidemiologic studies. In this context, a Birmingham (UK) group demonstrated that the establishment of a histopathology data pool facilitates epidemiological analysis [1]. Accordingly, what has been its place in such a pool serving a Nigerian major ethnic group, the Ibos or Igbos? [2] So far, I have used it to compare skull metastases of thyroid origin among the Japanese and Igbos [3]. Hence, the present study deals with Igbo women whose fractured femur emanated from the thyroid.

Case Reports

1. NG, a 65-year-old woman attended the National Orthopedic Hospital, Enugu, under Dr. Enweani for right subtrochanter pathological fracture of 9 months duration. Right radical mastectomy and radiotherapy for intraductal carcinoma had been carried out 6 years previously. Submitted to me were two irregular bony masses up to 8 cm across. They gritted on the knife on cutting. Microscopy revealed picturesque mass of thyroid with interspersed bone spicules. Metastatic thyroid femur was diagnosed with the comment that “this is most interesting as showing cancer in both thyroid and breast over the years.”
2. OJ, a 78-year-old woman was seen by Dr Enweani at the National Orthopedic Hospital, Enugu, complaining of a fall while walking 4 months earlier. Pathological fracture of left femoral neck was biopsied. An 8 cm irregular mass attached to the head of the femur was submitted to me. The soft parts were sampled. Microscopy revealed bone, fat and fibrous stroma as well as malignant thyroid parenchymal cells picturesquely. Metastatic thyroid carcinoma was diagnosed.
3. JO, a 53-year-old woman attended the City Hospital, Enugu, where she was seen by Dr Okwesili because of 6 months history of inability to walk. There was marked right lower limb swelling. There was pathological fracture of the femur with an unknown primary. The specimen which was sent to me was a 3.5 cm C-shaped soft mass with pale and dark areas clearly. Microscopy

Discussion

As regards a Japanese report, [4] the majority of skull metastases of thyroid carcinoma are of the papillary subtype. They presented a 55-year-old woman with skull metastasis from papillary carcinoma. In the present series, all were women aged 53 to 78 years (mean 65 years) and the growths were follicular. From Tunisia [5] and USA, [6] patients were reported as being aged over 45 years.

From Taiwan, the picture of the histological type was that the follicular growth led with 45% [7]. In contrast, papillary growths led the follicular type in the order of 22 to 17 in USA [8].

Concerning site selection, the USA paper put the femur last when compared with the vertebrae, pelvis, and ribs [8]. For an unknown reason, the femur held sway in this developing community.

Appeal for illustration was unavailing when made to the far famed Jaffe [9]. However, it suffices to cite him as follows:

The fact that the primary tumor is in the thyroid is often not recognized until tissue removed in the course of a biopsy on the skeletal lesion is examined histologically. The association is then a rather simple matter, since the cytologic pattern of the tissue from the metastatic focus nearly always clearly suggests a thyroid origin.

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