UNUSUAL PRESENTATION OF BONY METASTASES THYROID (Case Report)

Lt Col KAILASH CHAND ^{*}, Lt Col NK PANICKER ⁺

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KEY WORDS :

Introduction

Thyroid cancers are relatively rare and some of them have microscopic lesions which remain unsuspected till metastases occur. Follicular carcinoma accounts for about one quarter of all the thyroid cancers. Most lesions, if left undetected, disseminate through blood to distant sites. Thyroid tumours have predilection for bone metastases. Skeletal metastases occur in fewer than 5% cases of minimally invasive follicular carcinoma and less than 1% in tumours diagnosed as thyroid carcinoma [1]. Skeletal metastases are usually multiple and rarely solitary. Sometimes these metastases pulsate synchronously with the arterial pulse [2,3,4].

We present a case of a large solitary bone metastasis of follicular carcinoma thyroid who presented as a painful pulsatile lesion in the gluteal region.

Case Report

A 70-year-old male presented with the complaints of progres-

sive constant dull ache in the right hip of six months duration. The pain was insidious in onset. It aggravated on exertion and radiated to the right thigh. In later three months of his illness, the intensity of the pain increased and the patient preferred to lie down and avoid walking. It was not associated with any constitutional symptoms. On clinical examination, the right gluteal region was soft, tender and pulsatile. Radiograph of the pelvis showed destruction of the right ischium and iliac bones and presence of a soft tissue shadow in the pelvis. Computed tomography scan of the pelvis [Fig. 1,2] revealed a soft tissue mass in the right pelvic cavity with destruction of the right iliac and ischial bones with involvement of the hip joint.

Ultrasound guided FNAC from the gluteal region showed cellular aspirate with a few thyroid follicles having scanty colloid material [Fig. 3]. The cells were bland and looked like normal thyroid follicles having minimal nuclear variation. The diagnosis of a metastatic follicular carcinoma thyroid was made however on examination of the neck no apparent lesion was seen. The thyroidectomy specimen on gross examination showed a small well circumscribed solitary lesion measuring 0.5 x 0.2 cm on lower pole of the left thyroid. Microscopically, it revealed a thickly encapsulated follicular carcinoma with evidence of capsular invasion (Fig. 4 & 5). However no vascular invasion was evident.

Fig. 1 : CECT of pelvis showing destruction of right iliac and ischial bones. The medial aspect of the acetabulum also shows destruction. There is a soft tissue mass in the pelvic cavity

Fig. 2 : CECT of pelvis showing destructive expansile lesion of right ischium, part of the iliac bone with an associated soft tissue mass in the pelvic cavity

^{*} Classified Specialist Pathology, Military Hospital (CTC), Pune, ⁺ Ex Associate Professor (Pathology), Armed Forces Medical College, Pune 411 040.

Fig. 3 : FNAC, follicular carcinoma from right gluteal region showing minimal variation and pleomorphism of thyroid follicles with scanty colloid. (H & E x 400).

Fig. 5 : Photomicrograph of the capsule showing invasion by follicular carcinoma thyroid (H & E x 400).

Discussion

Follicular carcinoma thyroid commonly occurs in adults and old age with an average age of 52 years. It is common in females. Bony metastases occurs in 12.7% of these cases [5]. Skeletal metastases occur early in cases of follicular carcinoma as compared to papillary and anaplastic types. Metastases are usually osteolytic and most frequently involve bones with areas of active muscle insertion and bone marrow. Metastases often develop in vertebrae, sacrum and pelvis, skull, sternum, femur, humerus and clavicle. The osseous metastases may be extremely vascular and even pulsate [6]. The high vascularity of the tumour is

Fig. 4 : Photomicrograph of the solitary nodule, lower pole of the left thyroid showing follicular carcinoma with thick capsule (H & E x 400).

thought to be the reason of pulsative nature [1]. If the bone near the skin contains metastases it may become visibly deformed, swollen and hot. In non-goiter areas of the world where follicular carcinoma comprises only 5 to 10% of all the thyroid malignancy [7]. The solitary pulsatile tumour in a thyroid maintaining its normal configuration makes the diagnosis more difficult. Histological surprise may come from thyroidectomy specimen.

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