THYROID CANCER: NOT ALWAYS THE BEST CANCER TO HAVE

Tendler, Beatriz[1]; Delivanis, Danae[1]; Sosa, Julie Ann[2]; Friedlaender, Gary[3]; Bhargava, Amit[1]
[1]University of Connecticut Health Center, Division of Endocrinology, Farmington, CT, USA; [2]Duke University, Section for Endocrine Surgery, Durham, NC, USA; [3]Yale Medical Group, Division of Orthopedics and Rehabilitation, New Haven, CT, USA

Background/Purpose: Background: Well differentiated thyroid cancer (WDTC) presents with distant metastases in 3-15% of patients. Follicular thyroid cancer (FTC) accounts for 20% of WDTC, and metastasizes to the bone in 7-20% of cases. We present a patient with metastatic FTC to the femur.
Methods: Case: A 58 y/o lady, with no history of radiation or family history, was evaluated for a 1.9cm **left** thyroid nodule. Fine needle aspiration biopsy (FNAB) raised the suspicion for papillary thyroid carcinoma, favoring a follicular variant. BRAF was not identified. While surgery was planned, she experienced right leg pain which she attributed to fibromyalgia. An x-ray revealed a lytic lesion in the distal 1/3 of the **right** femur, with avid uptake on bone scan. The core biopsy confirmed metastatic FTC. Cells stained positive for TTF-1 and thyroglobulin.
Results: Post-operative pathology showed a 3cm poorly differentiated carcinoma arising in widely invasive follicular carcinoma. Four week post-operative thyroglobulin was 7904 ng/ml. Patient received 200.8 mCi of radioactive iodine-131 as well as zoledronic acid.
Discussion & Conclusion: Discussion: Nodule FNAB may not always alert us to the potential systemic involvement of thyroid cancer. Skeletal metastases diminish 10 year survival rates in WDTC. Patients may present with local pain or pathological fractures. Bisphosphonates or denosumab are indicated in this setting. **Conclusion**: The potential for metastatic disease exists in patients with WDTC. This must especially be recognized in a FNAB suspicious for a follicular neoplasm. Symptoms such as bone pain must be investigated, in order to decrease morbidity and provide timely management.