

## **A CHALLENGING FOLLICULAR THYROID CARCINOMA WITH MULTIPLE BONE METASTASES**

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**Background/Purpose:** Differentiated thyroid carcinoma is sometimes diagnosed by biopsy of metastatic lesion. We report the case of a man who presented with bone metastasis of a follicular carcinoma and whose evolution and management were very challenging.

### **Methods:**

**Results:** A 68 year-old man presented with cervical pain, paresthesia and weakness in the left C-8, D-1 territories. MRI showed a cervical mass of 42x43x64 mm, in the right thyroid lobe expanding to the carotid, trachea and vertebrae, causing spinal compression. PET-scan showed a highly metabolically active thyroid lesion (SUV= 55) and multiple metabolically active bone lesions. The bone biopsy showed a metastasis of a follicular thyroid cancer..

**Discussion & Conclusion:** Because of the presence of metastatic lesions, the patient received external beam radiation for his thyroid and D-1 tumors. Over the next year, he had local radiotherapy for the pain arising from progression of his other vertebral lesions. One year after cervical radiation, although PET-scan showed 60% reduction of the thyroid mass, progression of the bone lesions and new metastasis were noticed. He also recently developed a right vocal cord paralysis. Because of the progression of bone metastases, despite treatment with intravenous bisphosphonate, he is now considered a candidate to tyrosine kinase inhibitor(TKI) treatment. Few data are available on such treatment in patients with their primary lesion still in place. We believe that little benefit is expected in this type of tumor from surgery and radioiodine and that systemic control of disease will likely best be achieved with TKI.