

# **EP A084**

# TROCHANTERIC FEMORAL FRACTURE UNRAVELS FUNCTIONAL METASTATIC FOLLICULAR THYROID CARCINOMA: A CASE REPORT

https://doi.org/10.15605/jafes.038.S2.102

Ilham Ismail, Chee Keong See, Saiful Shahrizal Shudim, Nurbadriah Jasmiad, Zhe Lan Wong, Eileen Tan

Hospital Sultan Haji Ahmad Shah, Temerloh, Malaysia

#### INTRODUCTION

In postmenopausal women, the aetiology of low-trauma trochanteric femoral fractures is often attributed to osteoporosis. However, a pathologic fracture must also be considered. Follicular thyroid carcinoma (FTC) is the second most common thyroid malignancy, but it rarely coexists with hyperthyroidism. FTC can metastasize to bone, lung and mediastinum. Functioning metastatic disease in FTC is rare but have been reported in literature.

#### **CASE**

We report a case of metastatic FTC presenting with a pathologic trochanteric fracture and uncontrolled hyperthyroidism.

A 63-year-old female sustained a closed intertrochanteric femoral fracture following a low-trauma fall. She was receiving antithyroid medication for hyperthyroidism. Initial tests showed elevated FT4 (30.7 pmol/L), suppressed TSH and negative thyroid autoantibodies. Neck ultrasonography showed multiple thyroid nodules, including a 5.6 cm x 6.5 cm TIRADS 5 nodule. Following FNAC showing follicular neoplasm, she underwent total thyroidectomy with level 6 paratracheal lymph node dissection due to tumour infiltration of the right internal jugular vein (IJV) and parathyroid gland. Histopathology revealed a high-risk invasive FTC (pT4apN1a). Despite thyroidectomy, she remained hyperthyroid and required increased antithyroid therapy. Postoperative neck CT and carotid angiography revealed residual thyroid tissue and long segment IJV and superior vena cava thrombosis. No residual tissue was detected on re-operation. Concomitant high thyroglobulin (>5000 ng/mL) prompted F-fluorodeoxyglucose PET/CT which revealed recurrent disease at the thyroid bed, and metastases to cervical nodes, mediastinum, lungs, left femur and trochanter.

## **CONCLUSION**

This illustrates a complex case of FTC coexisting with hyperthyroidism, and metastases likely to be functionally active thyroid tissue. Subsequent management would require combined surgical intervention for trochanteric fracture with local radiation therapy and radioiodine ablative therapy.

# **EP A085**

# THE CONUNDRUM OF RADIOACTIVE IODINE TREATMENT IN CONCOMITANT DIFFERENTIATED THYROID CARCINOMA AND GRAVES' OPHTHALMOPATHY

https://doi.org/10.15605/jafes.038.S2.103

Ee Wen Loh, Shireene Ratna Vethakkan, Jeyakantha Ratnasingam, Lee-Ling Lim, Quan Hziung Lim, Nicholas Ken Yoong Hee, Sharmila Sunita Paramasivam

University Malaya Medical Centre, Kuala Lumpur, Malaysia

### **INTRODUCTION**

Although uncommon, concomitant differentiated thyroid carcinoma (DTC) has been reported in patients with Graves' disease (GD). Surgery is the mainstay treatment for DTC followed by radioactive iodine (RAI) ablation in selected patients. RAI therapy may pose a problem in patients with concurrent Graves' ophthalmopathy (GO) as it may potentially worsen the ophthalmopathy. This could result in a treatment conundrum.

### **CASES**

Case 1. A 63-year-old female presented with significant bilateral exophthalmos and ophthalmoplegia. She had a diffuse goiter and was thyrotoxic, with high TSH-stimulating immunoglobulin (TSI) levels. She was diagnosed as GD with sight-threatening GO. She received multiple courses of methylprednisolone as well as immunosuppressant therapy for GO. She underwent total thyroidectomy as definitive therapy. Histopathologic examination (HPE) of the thyroid gland revealed papillary thyroid carcinoma (PTC) in both thyroid lobes, with resection margin of <0.1cm in the right lobe. Following counseling for RAI ablation, she refused RAI due to the risk of worsening GO. She is currently on regular surveillance with no evidence of PTC recurrence to date.

Case 2. A 41-year-old female developed moderate active GO three years after initial diagnosis of GD. She was given high-dose prednisolone for GO and underwent total thyroidectomy as definitive therapy for GD. HPE showed multifocal follicular thyroid carcinoma with suspicion of vascular permeation. After multi-disciplinary discussions, she underwent 10 fractions of ocular radiotherapy and received prophylactic prednisolone cover during RAI. On close monitoring, her GO has remained stable thus far.