AB171. SOH21AS177. An unusual case of proximal humerus metastases from differentiated thyroid cancer: a case report and literature review

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Background: Papillary thyroid cancer accounts for greater than 85% of thyroid cancer. 3.9% of thyroid cancers develop bone metastases with a greater association with follicular and medullary subtypes. However, data on bone metastases in differentiated thyroid cancer is limited and not well reported.

Methods: A 53-year-old female underwent a thyroid lobectomy for a left sided goitre.

Results: Histopathology results identified a papillary thyroid cancer of follicular variant, and consequently a completion thyroidectomy was performed. Post-operative recovery was uncomplicated and normal TSH levels were recorded. Four months later, the patient developed mild bony pain and subsequent PET scans revealed multiple bony metastases, the largest in the left proximal humeral shaft. Subsequently, a proximal humeral resection with glenohumeral reconstruction was performed. External beam radiotherapy and radioactive iodine treatment was also carried out.

Conclusions: Bony metastases secondary to thyroid cancer are rare, however clinical history and examination is imperative for early detection. The shoulder girdle represents the least common site of spread at an incidence of 5.4%. As such, requirements for prosthetic replacement of the shoulder girdle are rare. Conventional surgical strategies for humeral metastases are intramedullary nails, plate fixation and cement augmentation for reconstruction of large bone defects.

Keywords: Humerus; long bone metastases; papillary thyroid cancer; shoulder replacement; thyroid cancer

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Footnote

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