

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

Hannah Markey¹, Anna Fullard¹, Marcia Bell¹, Michael Kerin¹, Gary O'Toole²

¹Department of Surgery, Galway University Hospital, Galway, Ireland; ²Department of Trauma and Orthopaedics, Cappagh National Orthopaedic Hospital, Dublin, Ireland

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

Acknowledgments

Funding: None.

Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Open Access Statement: This is an Open Access article distributed in accordance with the Creative Commons Attribution-NonCommercial-NoDerivs 4.0 International License (CC BY-NC-ND 4.0), which permits the non-commercial replication and distribution of the article with the strict proviso that no changes or edits are made and the original work is properly cited (including links to both the formal publication through the relevant DOI and the license). See: <https://creativecommons.org/licenses/by-nc-nd/4.0/>.

doi: 10.21037/map-21-ab171

Cite this abstract as: Markey H, Fullard A, Bell M, Kerin M, O'Toole G. An unusual case of proximal humerus metastases from differentiated thyroid cancer: a case report and literature review. *Mesentery Peritoneum* 2021;5:AB171.