

Putting The Giant To Sleep. Use Of Denosumab In Delayed Presentation Of Lung Metastasis In Giant Cell Tumour Of Distal Radius

Duski S¹; Narasimman S²; Diong NC²; Muthukkumaran T³; Chye PC¹

¹ Orthoedic Oncology Unit, Department of Orthopedic & Traumatology, Hospital Kuala Lumpur, Kuala Lumpur

² Department of Thoracic Surgery, Hospital Kuala Lumpur, Kuala Lumpur

³ Department of Oncology and Radiotherapy, Hospital Kuala Lumpur, Kuala Lumpur

INTRODUCTION:

We present a case of giant cell tumour (GCT) of left distal radius who later developed lung metastasis after 3 years of the distal radius GCT resection. She was treated with a course of Denosumab followed by surgical resection of the lung nodule.

REPORT:

A teenage girl was diagnosed with GCT of the distal end of left radius in 2014. Computed Tomography of the thorax and bone scan did not show disease spread. She underwent excision of left distal radius, centralisation of carpus onto ulna and wrist fusion and had defaulted follow up until 3 years later when she presented with a fractory cough. There was no local recurrence at the primary site when patient presented with the lung symptoms. Chest radiograph showed a large radiopaque lesion occupying the right lung middle and lower zones. CECT Thorax revealed 3 ill-defined pleural based extra pulmonary tissue lesions at the right hemithorax and another one in the left hemithorax. Biopsy of right lung confirmed GCT. She was given a treatment plan of subcutaneous Denosumab 120 mg at days 1, 7, 15 and 30 followed by monthly intervals for 6 months. The chest symptoms improved after the 2nd dose and a repeat chest x-ray after 3 doses of Denosumab showed significant reduction in the size of the lung mass. Surgical resection of the lung mass histopathological examination revealed tissue mass consistent with GCT. The patient has fully recovered from her symptoms and is well.

CONCLUSION:

Lung metastases in GCT, although rare, has to be taken into consideration in managing GCT cases. Denosumab and surgical resection have proven to be an effective mode of treatment.

REFERENCES:

- 1 Khodamorad Jamshidi et al. Denosumab in Patients with Giant Cell Tumor and Its Recurrence: A Systematic Review. Arch Bone Jt Surg. 2018 Jul; 6(4): 260–268
2. van der Heijden L. Giant cell tumour of bone in the denosumab era. Eur J Cancer. 2017 May;77:75-83. doi: 10.1016/j.ejca.2017.02.021. Epub 2017 Mar 30

