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MULTIFOCAL, METACHRONOUS GIANT CELL TUMOUR WITH RARE LOCALISATION AND METASTATIC SPREAD: A CASE REPORT

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Background: Giant cell tumour (GCT) of bone represents about 5% of primary bone tumours, but occurrence of multifocal GCT is rare. Herein, we present a case of a 59-year old male patient, who suffered from multifocal, metachronous GCT, which involved skull, os sacrum, lung and abdomen. **Case presentation:** A 59-year-old patient presented at our department with an osteolytic lesion in os sacrum in February 2012. In 2007 a lung tumour was found, suspected to be a carcinoma and treated by lobectomy. Further, in 2009 he was diagnosed for an osteolytic lesion in os frontale, which came out to be a GCT. After MRT and CT-scans of the sacrum it was decided to perform a biopsy at our department. The histological diagnosis from biopsy revealed a GCT. Therefore, the specimen of the lung from 2007 was questioned again and the differential diagnosis of metastatic GCT, due to a masked primary lesion, was brought up. Because of the patient's history it was decided to start systemic therapy with RANKL-inhibitor Denosumab. A few months after diagnosing GCT at the sacrum, a routine CT-scan of the abdomen revealed another lesion. Excision revealed the diagnosis of GCT. During a follow-up period of 6 months there was no progression of disease during therapy with Denosumab.

Discussion: GCTs of bone are classified as benign or intermediate neoplasm and mostly affect long bones. Multifocal GCTs occur in less than 1% of all patients and additionally metastatic spread is very uncommon. In our case the patient developed GCT in the skull and spine with an interval of 3 years and he also showed metastatic spread to lung and abdomen. Metastatic lesions of a masked primary GCT could be mistaken and could lead to other/wrong ways of therapy.

Conclusion: The present case report emphasizes the possibility of a multifocal GCT of bone as a possible differential diagnosis for multiple osteolytic lesions with metastatic spread to lungs, abdomen or other regions.

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