RARE GIANT CELL TUMOUR OF THE SECOND METATARSAL: DIAGNOSTIC AND MANAGEMENT CHALLENGES

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Introduction: Giant cell tumour (GCT), a painful benign locally aggressive and recurrent lytic tumour typically found at the meta-epiphysis in skeletally mature long bones, comprises 5% of primary bone tumours and 20% of benign bone tumours. Metastases is seen in 2% of cases, with a preponderance for women compared to men within the ages of 30-50. Only 1.5-5% occur in the small bones, more commonly the hands than feet, wherein GCT of the metatarsal bones (MTB) is rare [1-3].

Discussion: A nineteen year-old male patient presented with a two-year progressively painful and enlarging lump of the dorsal right foot. Examination elicited a tender, hard, immobile oval-shaped 2x2cm lump arising from the second MTB. Plain radiographs revealed a juxta-articular expansile lytic soap-bubble lesion of the proximal second MTB, with intact thinned-out cortex (Campanacci Grade II), not involving adjacent bones. An MRI was inconclusive, showing no soft-tissue infiltration. Blood investigations were negative for infection. Subsequent core biopsy confirmed the diagnosis of GCT. A course of denosumab was completed before he underwent resection with in-situ iliac bone graft reconstruction secured by a locking plate. Follow-up was promising with graduation to full-weight bearing and successful continuation of daily and sporting activities. Long-term review has been planned to observe recurrence. Management of this rare condition in the literature according to descending rates of local recurrence include curettage alone (72%), curettage with adjuvants (13%); resection then reconstruction (10%); proximal amputation (10%) [3]. Small-bone GCT is considered to be more aggressive than long-bone GCT, necessitating long-term follow-up.

Conclusion: We emphasise the accurate diagnosis of this rare condition as adequate resection and long-term follow-up is important.