

Giant Cell Tumour in an Adult with Haemophilia

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I. Introduction

Haemophilia is one of the most common genetically inherited causes of bleeding disorders. The usual presentation is continuous bleeding from a wound. Multicentric giant cell tumour (GCTs) of the extremity is rare in haemophilia. GCT can be primary, occurring incidentally with hemophilia in joints subjected to repeated haemarthrosis or a phenomenon secondary to repeated haemarthrosis.

II. Case Report

A 32 year old male, already diagnosed with hemophilia type A presented with swelling and pain of left ankle with restricted joint movement without any prior history of trauma. Ultrasound of left ankle was suggestive of haemarthrosis and soft tissue bleeding in the absence of precipitating trauma. The patient was given 10 units of Factor VIII over a period of 5 days and subsequent sonography after 10 days showed resolution of haemarthrosis in left ankle. However patient still complained of joint pain and restriction of joint moment. An X-ray was taken, a lytic area seen in lower end of tibia with no sclerosis or periosteal reaction. The MRI findings were highly suspicious for Giant Cell tumor / Giant cell reparative granuloma. FNAC of the lesion on left tibia was done and giant cells were seen in the smear. However we could not establish whether it is Giant Cell tumor / Giant cell reparative granuloma. We could not establish if the lesion is primary GCT occurring coincidentally with haemophilia in joints subjected to repeated haemarthrosis or a phenomenon secondary to repeated haemarthrosis.

- **A well defined lytic expansile lesion is seen in the lower end of the tibia in the sub articular region (of the tibiotalar joint). It appears heterogeneously hyperintense on Stir sequence images; intermediate to low intensity on T2W images and hyperintense on T1W images. T1 hyperintensities and T2 heterogeneity suggests hemorrhagic component. There is thinning of the cortex of the bone (adjacent to the tibiotalar joint). There is presence of perilesional edema. The lesion approximately measures 2.5x 2.4 x 2.4 cm.**
- **Similar findings were also found on MRI scan of right ankle joint. It measures 1.5x1.4x1.2cm.**
- **The MRI findings were highly suspicious for Giant Cell tumor / Giant cell reparative granuloma.**

FNAC of the lesion of left tibia was done and giant cells were seen in the smear.

III. Conclusion

The early diagnosis of GCTs in haemophilia may be delayed unless appearance of symptoms of pathologic fracture. The Multicentric GCTs do occur in haemophilic patients and their incidence might be underestimated, as it might not be judged because immediate symptoms of pain would resolve with appropriate factor replacement. We can diagnose GCT in time and treat it with curettage and PMMA replacement if the growth is aggressive and to prevent significant bone destruction and mobility disorder.

References

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