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Case Report

GIANT CELL TUMOR OVER HEAD OF FEMUR PRESENT WITH PATHOLOGICAL FRACTURE TREATED WITH HAMI ARTHOPLASTY- A CASE REPORT

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ABSTRACT

Giant cell tumours of the femoral head and neck treated by primary treatment by curettage and bone grafting. But recurrence within years. Necessitating the likelihood of recurrence followingcurettage and bone grafting, particularly at thisanatomical site, is stressed, and the possibility thathip replacement arthroplasty be considered theprimary treatment of choice as per literature. We are presenting a case of pathological fracture of femoral neck in a 55 years male patient treated with hamiarthoplasty, through modified hardinge approach.

INTRODUCTION

The treatment of giant cell tumor of head and neck of femur remains controversial, including curettage and bone grafting, local excision, arthoplasty. Conservative surgery by curettage and bone grafting is the most widely used form of primary treatment. However, this is followed by a recurrence rate varying from 34% to 50% at various anatomical sites' (Dahlin *et al.,* 1970; Goldenberg *et al.,* 1970; McGrath, 1972). In additionto this high rate of recurrence, approximately10% of giant cell tumours of bone become franklymalignant, particularly if they receive radiationalong with other forms of therapy and occasionallyproduce metastases even though histologicallybenign (Johnson *et al.* 1959). Endoprosthetic replacement in suitable sites is usually employed as a secondary procedure – for recurrences and subsequent complications such as pathological fractures.As the proximal femur is an uncommon sitefor this rare primary bone tumour, there is littleinformation in the literature about the results of aparticular form of treatment at this anatomical site. To evaluate the effectiveness of definite management of giant cell tumor over head and neck of femur we have done hamiarthoplasty.

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Case Presentation

We are presenting a case of a 55 years old male patient with pain over left groin for last 5 months. He manages his daily activity by pain killer prescribed by local doctor. Following a trivial trauma (fall from bicycle) he became bed ridden. He cannot bear weight on left side. Radiology shows pathological fracture over neck of femur .systemic examination and blood test shows no abnormality.

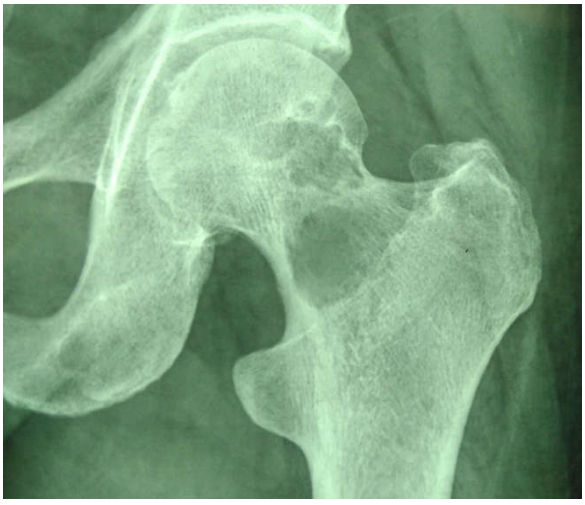

Fig. 1. osteolytic leasion Over headf and neck

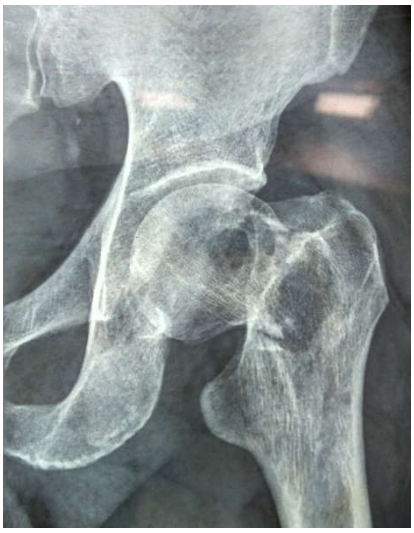

Fig. 2. pathological fracture

Core Needle Biopsy Shows-Giant Cell Tumor

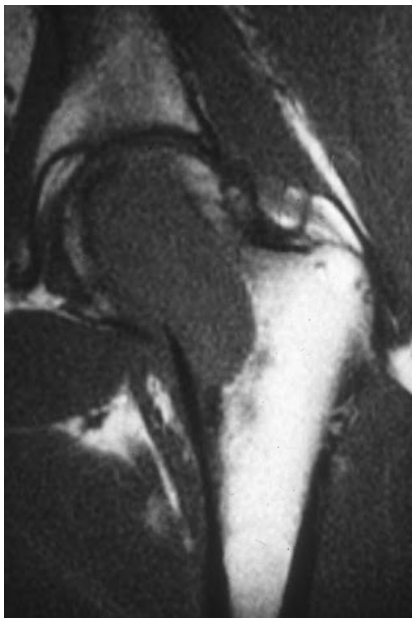

Fig 3. MRI Shows Osteolysis

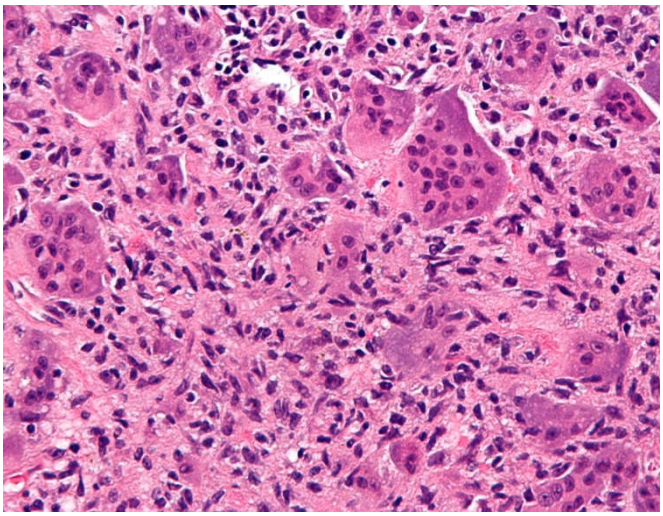

Fig. 3. Histopathology of giant cell

Fig. 4. Clinical pic

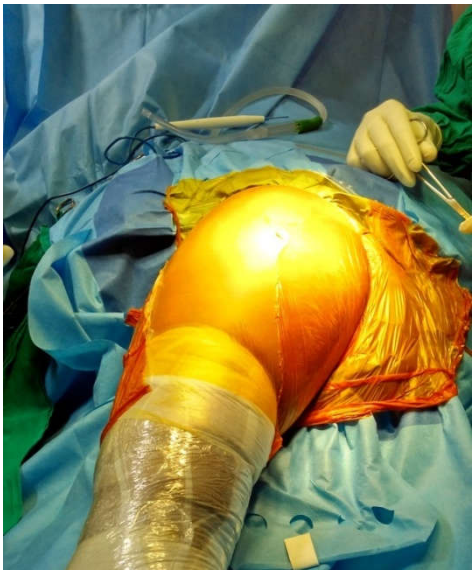

Fig. 5.

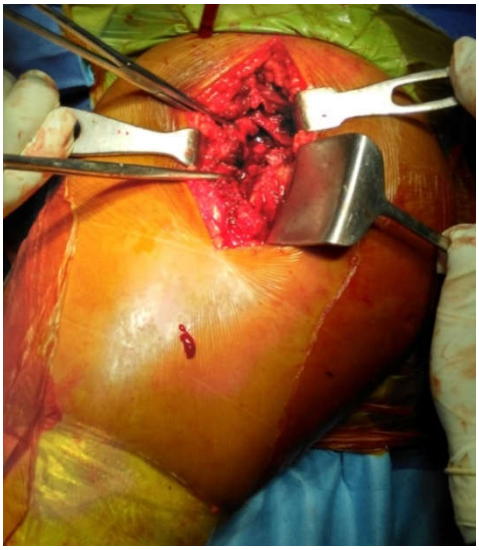

Fig. 6.

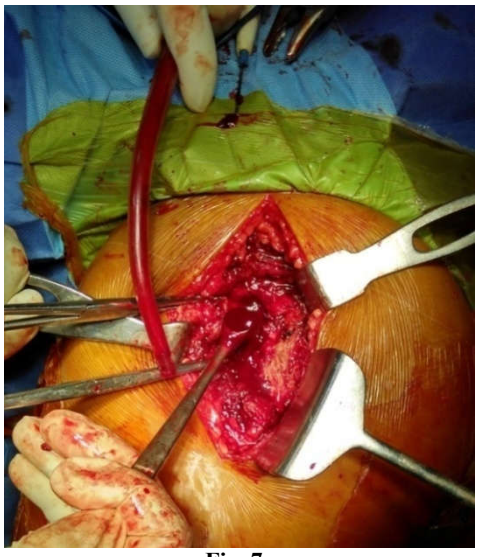

Fig. 7.

Fig. 5, 6, 7. Intra operative draping

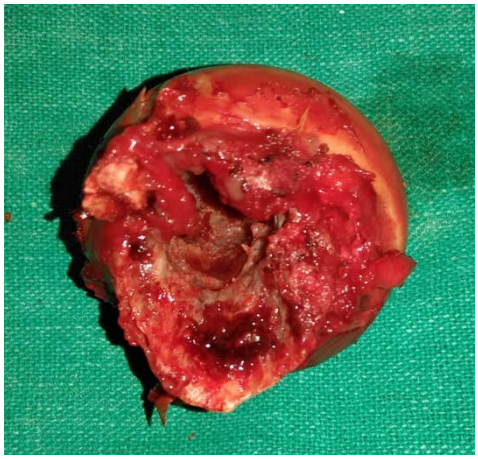

Fig. 8. shoes grayish brain tissue like meterial comes out from head of femur

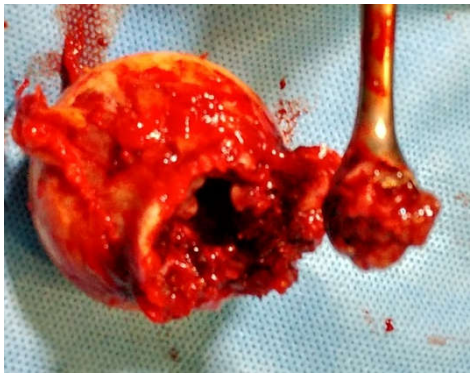

Fig. 9. Scooping out of the lesion

We plan for definite management. We prepare the patient for hamiarthoplasty. Through modified hardings approach we remove the head and scupping out proximal femur and trochanteric region. lastly we put 51 no fenestrated bipolar prosthesis. Wound closed in layers, with negative suction drain. No post operative complication. We send biopy for the Confarmation of diagnosis.

Fig. 10.

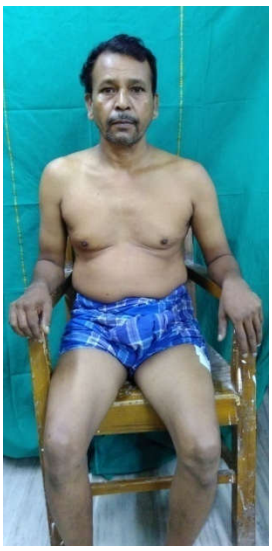

Fig. 11.

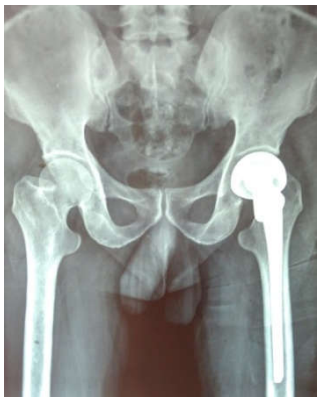

Fig. 12.

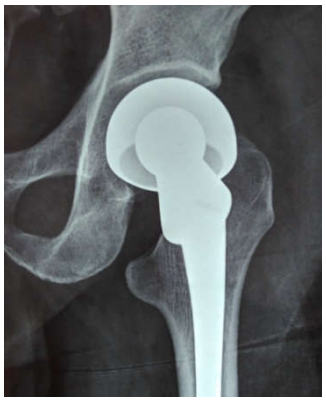

Fig. 13.

Fig. 10, 11, 12. Post operative picture of patient and radiography

Patient came after 6 months patient has no complaine.
Radiography shows no reccuence no osteolysis.
Follow up x-ray shows no reccurence.

DISCUSSION

Most recurrences of giant cell tumour develop within two years of primary treatment (Goldenberg *et al.,* 1970; Johnson *et al.* 1959; Shifrin, 1972). The unpredictable clinical behaviour of giant cell tumours and the need for prolonged, regular and careful follow up have also been emphasized by many authors (Johnson *et al.* 1959; Jaffe, 1953). The histological grading suggested by Jaffe and colleagues (Jaffe, 1940) indicates the aggressiveness of giant cell tumours, but it does not reliably predict the potential for local recurrence or pulmonary metastases, particularly in cases of Grade 1 and 2 lesions (Goldenberg *et al.,* 1970; McGrath, 1972; Jaffe, 1940; Jewell and Bush, 1964). The practical difficulty of total clearance of giant cell tumour by curettage in the femoral neck has been observed. The use of cryotherapy to necrotize the wall of the cavity after curettage has been advocated to reduce the recurrence rate (McGrath, 1972), but the value of this is controversial. The first reported case of a successful prosthetic implant for tumour was for a recurrent giant cell tumour of the proximal femur" (Jaffe, 1940). Endoprosthetic replacement of

the proximal femur has been reported to give good functional and pain-free results. In a biomechanical evaluation of proximal femur and custom hip joint replacement following segmental resection of bone tumours, give a virtually normal pattern ofgait and function of the hip muscles (Jewell and Bush, 1964).

Conclusion

Although there may be controvercy to advise hip replacement arthroplasty as the primary treatment of choice in young patients, the likelihood of recurrence following curettage and bone grafting, particularly at this anatomical site, must be stressed. It may be that hip replacement arthroplasty should be considered the primary treatment of choice rather than reserving it as a secondary procedure for recurrences and associated complications. But to prove this we need to publish more cases study.

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