



**A RARE CASE OF EOSINOPHILIC
GRANULOMA TREATED WITH A NOVEL
APPROACH.**

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INTRODUCTION

- **Eosinophilic Granuloma is a benign tumor like condition which is considered to be a part of the spectrum of Langerhans histiocytosis in which cells of the Reticuloendothelial System form granulomatous lesions at microscopic level which grossly appear as osteolytic lesions resembling bone tumors. It commonly affects children (<10 years).**
- **The Skull is the most common bone involved. EG commonly involves the flat bones(70%) due to its tendency of eating up the marrow spaces, also involving the long bones(30%) in the diaphyseal region**
- **In our study, we report a case of EG in the proximal femur metaphysis in a 4 year old male child with a non-classic presentation, course as well as resolution.**

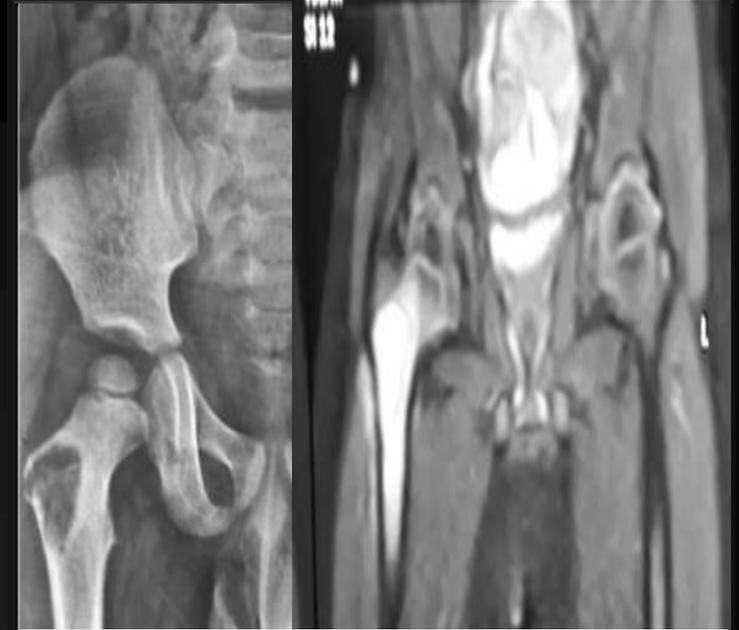


Figure 1
(Preoperative
Radiograph)

Figure 2
(T2W MRI Image)

CASE PRESENTATION AND MANAGEMENT

- ❖ **A 4 year old male child presented with a right sided painful limp since the last four months. Examination indicated tenderness over the right hip -localized over the trans trochanteric area.**
- ❖ **XRAY of the Pelvis with Both Hips indicated a cystic, osteolytic type of lesion with regular borders seen in the metaphyseal region of the right proximal femur over the greater trochanter with a good thick posteromedial calcar (Figure-1). MRI revealed a lytic lesion around Proximal Femur showing hypointense to isointense lesion(Figure 2)**
- ❖ **Histopathological examination showed-Bony Destruction with collections of large number of eosinophils mixed with histiocytes. The histiocytes showed twisted nuclei suggestive of Langerhans cell histiocytes.**
- ❖ **The further management planned for the above was –bone curettage with bone grafting(As posteromedial cortical calcar is thick and not involved in Xray).Bone Curettage was done followed by chemical cauterization with 10% Phenol, thorough wash was given and the walls of the cavity were burred off with a diamond burr until fresh bleed was obtained(Figure 3). This was augmented by bone allograft.**



Figure 3
(Intraoperative
image of the
cavity post
burring showing
fresh bleed)



Figure 4
(Immediate Post
operative radiograph)

RESULTS AND CONCLUSION

- ✓ **1 year follow up XRay showed the signs of healing post operatively (Figure-5). There was no recurrence of a similar lesion at the same site/ any other site.**
- ✓ **Eosinophilic Granuloma often presents with a wide range of clinical symptoms and sometimes with an unpredictable clinical course requiring multiple surgical as well as non-surgical interventions.**

- ✓ **We provide additional and independent evidence of the efficacy of bone curettage with chemical cauterization and bone grafting in the management of EG of the femur. This method is also relatively inexpensive with no major side effects as at no point did it include the use of injectable steroids, chemotherapy or irradiation.**



Figure 5
(One year follow up radiograph showing complete resolution and no recurrence)