

# Unicameral Bone Cysts Treated By Serial Injection Of Methylprednisolone - Case Report

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## INTRODUCTION:

Treatment of UBC has many different methods, each with its own comparable success rate and complications.

## CASE REPORT:

16 years old patient presented with sudden onset of pop sound over left arm associated with pain while doing push up. On examination noted tenderness and deformity over left arm. Neurovascular status intact. X rays shows expansile lytic lesion with thin sclerotic margin and narrow zone of transition at proximal left humerus. MRI suggestive of unicameral bone cyst. Patient underwent series of intra osseous methylprednisolone injection for 3 time with 1 month interval. Procedure done as daycare treatment under local anesthesia with image intensifier guidance. On latest follow up X rays shows resolution of the lesion. Left upper limb function intact with no complication.

## DISCUSSIONS:

No difference was observed in terms of the healing of cysts between the patients treated with a steroid injection technique and the patients that were only observed. Prospective comparative study between methylprednisolone vs. bone marrow injection involving 79 patient show no advantage could be shown for the use of autogenous injection of bone marrow compared with injection of steroid. One study shows long-term results of steroid injections for UBC's treatment result in complete healing in the majority of cases according to Neer-Campanacci system. Author conclude that steroid injections for UBC's treatment demonstrated to be a mini-invasive technique, with low surgical risk, inexpensive, with minimum hospital stay and optimal results.<sup>3</sup> Surgical intervention which involves curettage and bone grafting with or without internal fixation is indicated in symptomatic latent cyst that have not responded to steroid injections.

However this should be avoided in active lesion as communication with physis may lead to growth arrest.<sup>1, 2, 3</sup>



Image 1: Initial x ray  
Pre injection



Image 2: Final x ray  
after serial injection

## CONCLUSION:

Primary treatment with steroid injection offer satisfactory outcome for cases of simple bone cyst in children, thus it should be consider before more invasive methods are to be applied.

## REFERENCES:

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2. Ahn JI, Park JS. Pathological fractures secondary to unicameral bone cysts. International orthopedics. 1994 Feb 1; 18(1):20-3.
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