

# Polidocanol: A Non-Operative Treatment Option for Aneurysmal Bone Cyst

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## INTRODUCTION:

Aneurysmal Bone Cyst (ABC) is a benign expansile bone lesion which can be locally destructive. 90% of cases occur below 30 years of age.

## REPORT:

We present a case of right proximal humerus pathological fracture secondary to ABC in a 5-year-old boy. Patient received polidocanol injection 4 times at monthly intervals.

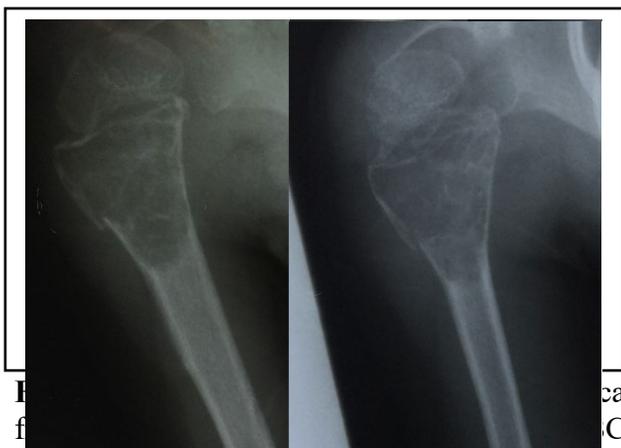


Figure 1: Serial X-ray showing pathological fracture of proximal humerus, before polidocanol injection.

Procedure was done under aseptic technique with Imaging Intensifier guidance. The cyst was aspirated first, then 80mg (4mg/kg) Polidocanol was injected. Serial Xray showed resolution of the lesion with increase cortical thickness and formation of multiple bony trabeculae. During subsequent follow up, patient remained asymptomatic with no limitation in shoulder range of motion.

## DISCUSSION

Polidocanol (hydroxypolyaethoxydodecan) is a sclerotherapy agent. It causes damage to the endothelium of vessels thus starting a coagulation cascade that results in thrombosis.



Figure 2: Figure 2: Serial Xray showing progressive improvement after Polidocanol injection.

Compared to conventional intralesional excision with extended curettage, Polidocanol has an advantage of having similar healing rate with higher functional outcomes, shorter hospital stay<sup>3</sup> and less infection rates. Polidocanol side effect are usually self-limiting. It includes pain, swelling, numbness and discolouration at injection site. Several studies show excellent result following polidocanol injection with a cure rate of 97%<sup>1</sup> with minimal side effect<sup>2</sup>.

## CONCLUSION:

Polidocanol injection is a safe and efficacious treatment in ABC.

## REFERENCES:

- 1) Rastogi et All - Treatment of aneurysmal bone cysts with percutaneous sclerotherapy using polidocanol: A Review Of 72 Cases With Long-Term Follow-Up. The Journal of bone and joint surgery. British volume. 88. 1212-6. 10.1302/0301-620X.88B9.17829.
- 2) Brosjö et All - Sclerotherapy with polidocanol for treatment of aneurysmal bone cysts, Acta Orthopaedica, 84:5, 502-505, DOI:10.3109/17453674.2013.850013
- 3) Varshney et All - Is sclerotherapy better than intralesional excision for treating aneurysmal bone cysts?. Clin Orthop Relat Res. 2010;468(6):1649-1659. doi:10.1007/s11999-009-1144-8