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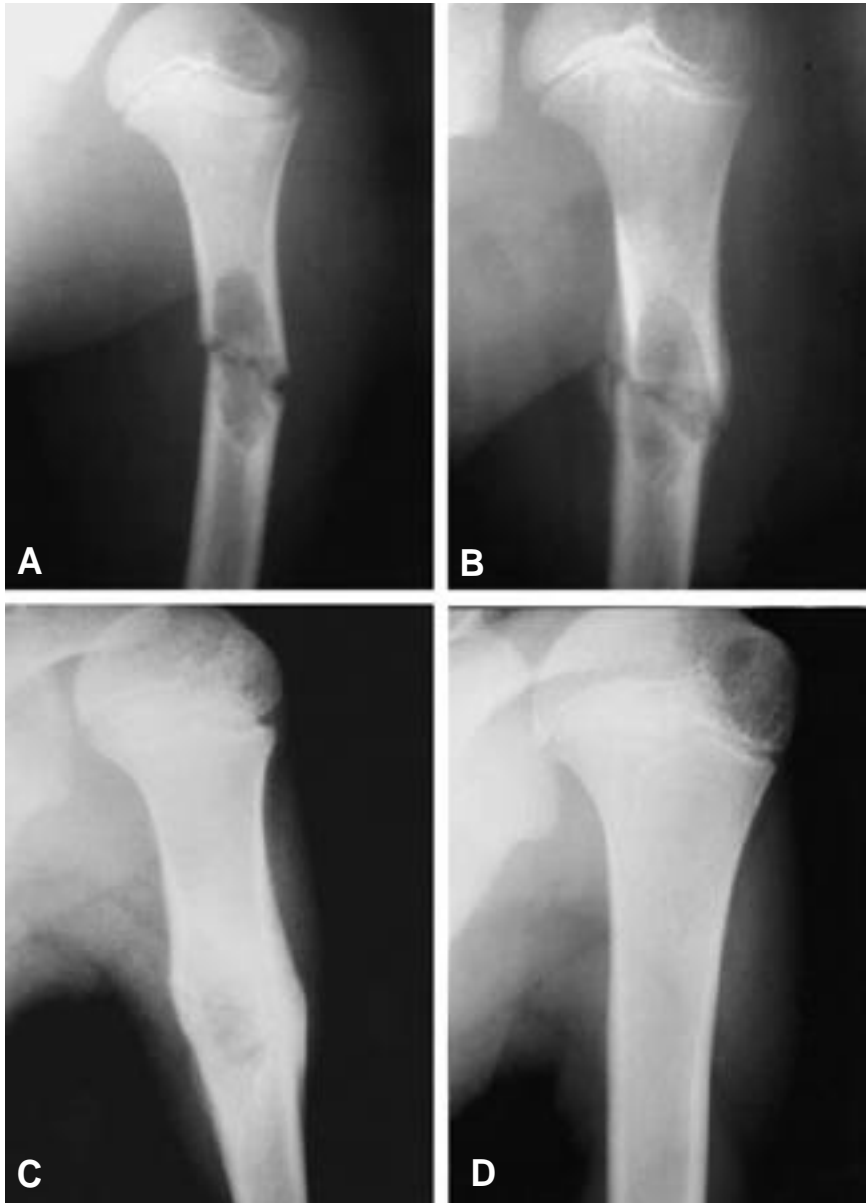


Fig. 1. Radiographs of a 9-year-old female with pathologic fracture secondary to simple bone cyst of the left proximal humerus. (A) Initial A-P radiograph shows pathologic fracture and cyst formation of the left proximal humerus. (B) After 4weeks, A-P radiograph shows callus formation of the pathologic fracture. (C) After 8weeks, A-P radiograph shows union of the pathologic fracture and healing process of the simple bone cyst. (D) After 16month, A-P radiograph shows complete healing of the simple bone cyst.

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Fig. 2. Radiographs of a 12-year-old male with pathologic fracture secondary to simple bone cyst of the left femur shaft. **(A)** Initial A-P radiograph shows pathologic fracture and cyst formation of the left femur shaft. **(B)** MRI shows formation of the cyst more precisely. **(C)** Postoperative A-P view show well fixation of plate after open reduction. **(D)** After 3months, A-P radiograph shows union of the pathologic fracture and healing process of the left femur shaft. **(E)** After 36months, A-P radiograph shows complete healing of the simple bone cyst.

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Outcomes of Treatment for Pathologic Fractures Secondary to Simple Bone Cyst

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Purpose: To suggest an appropriate treatment modality regarding analyze outcomes of treatment for pathologic fracture to simple bone cyst of the long bone.

Materials and Methods: We selected 12 cases with pathologic fracture of the long bone among the 31 cases treated for simple bone cyst from December. 1993 to May. 2001. The mean age was 9 years ranged from 2 years to 19 years, male was 11 cases and female was 1 cases, and the mean follow up interval was 32.9 month ranged from 12 month to 69 month. The principle of treatment for pathologic fracture of the long bone was conservative treatment except operative treatment for fracture with displacement of the femur. After fracture was united, the residual lesion was treated by local steroid injection, cortical drilling, curettage & bone graft. But we observed without specific treatment in cases that had healing process of simple bone cyst followed by bony union. The clinical results were evaluated as excellent if simple bone cyst was completely healed, as good if that had process of healing, as poor if that was no change or more increased in size.

Results: The pathologic fracture was united in all cases treated with conservative treatment in 9cases and by open reduction with internal fixation in 3 cases. After fracture was united, the 6 cases were observed without specific treatment, because they had healing process of cyst, and had outcomes as good and excellent.

Conclusion: We suggest to need observation when simple bone cyst has healing process after pathologic fracture was united, otherwise secondary treatment will be needed when residual lesion is persisted

Key Words: Simple bone cyst, Pathologic fracture

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