



# Posttraumatic Grafting of a Radial Cyst Using Opteform®

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## PRESENTATION

A 5-year-old girl presented to our department with a pathological fracture through a radial bone cyst. Six months previously she had sustained fractures to the right radius and ulna at the junction of the middle and distal thirds. The arm was treated in a cast where loss of position occurred during follow-up, but due to the patient's age, the deformity was accepted.

The pathological fracture through the bone cyst healed, but the cyst increased in size and the cortex became progressively thinner. The risk of further pathological fracture was considered to be high and the lesion was therefore treated with curettage and grafting.

## OPERATION

The operation consisted of a standard Henry approach to the radius and separation of the very thick periosteal layer. A window was fashioned in the cortex and a fluid filled cyst was identified with a fibrous and friable lining. Curettage was performed and material sent for frozen section and histology. The results were consistent with an aneurysmal bone cyst.

The entire fibrous membrane was removed and the defect packed with 5ml Opteform® premixed with the patient's blood. Good filling of the defect was achieved. The osteoperiosteal flap was replaced, and postoperatively the patient was treated in a cast for four weeks.

## POSTOPERATIVE RESULTS

The patient regained forearm function within a few weeks of the cast removal and has had no functional or neurological deficit. Follow-up 10 months from surgery shows excellent incorporation of the graft and progressive remodeling of the radius.



Figure 1: Radial bone cyst seen in a 5-year-old girl. The pathological fracture can be clearly seen.

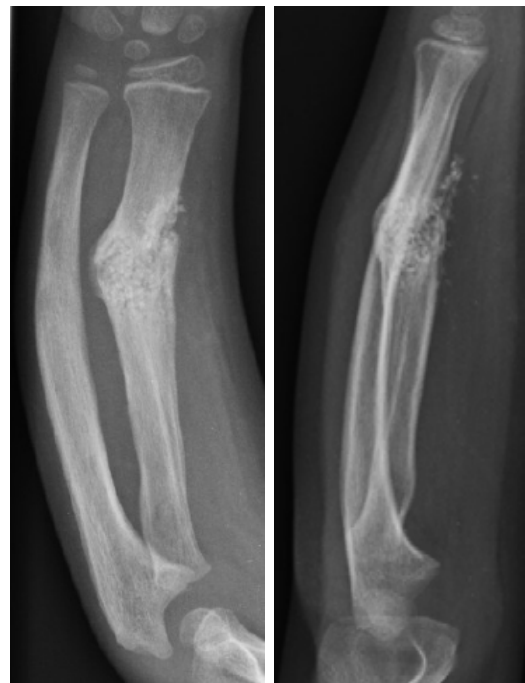


Figure 2: Postoperative radiograph showing excellent packing of the defect with Opteform.



*Figure 3: Complete healing is seen at eight weeks postoperatively.*



*Figure 4: 10 months after grafting and there is excellent development with continued remodeling of the radius.*

