

## Giant Cell Tumor of Distal Radius: A Case Report

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### INTRODUCTION:

Giant cell tumor of the bone (GCTB) is locally aggressive bone tumor occurred in distal radius associated with significant morbidity. Here are our experience treating this case in our center.

### REPORT:

A 22 year old lady presented with pain, swelling and limited motion of left wrist for 3 months. The wrist was tender, firm diffuse swelling, limited pronation, and supination, with intact neurovascular status. Radiograph showed expansile lytic lesion, cortical thinning of distal end left radius extending to metaphysis. MRI revealed heterogenous lesion enhanced on T2W1 with cortical break.

Wide resection of left radius, reconstruction with 8cm non vascularized fibula autograft, plating and k-wire of distal fibular graft was done. The left distal radioulnar joint subluxated after removal of k-wire 6 weeks post-operative. She undergone revision surgery with reconstruction of the joint capsule, and arthrodesis of wrist joint. Currently, the graft incorporated well with the remaining radius.

Managing GCT distal radius are challenging and most of Campanacci grade II & III cases requires surgery and need for skeletal reconstruction with bone graft while providing skeletal and joint stability. The shape of proximal fibular autograft make it as preferable choice, with ability to continuous remodelling of the articular surface and restricting chondrolysis. Those providing good long-term functional outcome and low complication rate such as infection, implant and graft failure. The use of non-vascularized fibular graft, more than 5cm is economically feasible and shorter operation time provided good vascularity and soft tissue coverage.



Figure 1: Initial AP and lateral radiograph.



Figure 2: Post operative radiograph.

### CONCLUSION:

Wide resection and non vascularized autologous proximal fibula grafting is one of the treatment modalities to tackle a large defect of the distal radius.

### REFERENCES:

1. Kamal, A. F., & Muhamad, A. (2020). Outcomes of En bloc resection followed by reconstruction of giant cell tumor around knee and distal radius. A case series. *Annals of Medicine and Surgery*, 49, 61-66.