

# ANEURYSMAL BONE CYST OF DIAPHYSIS OF RADIUS – A CASE REPORT

## Orthopaedics

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### Abstract:

A case of Aneurysmal bone cyst of diaphysis of radius was reported at rare site and bone. We had this case of Aneurysmal cyst involving diaphysis of radius out of 55 cases of aneurysmal bone cyst in our department.

**Keywords:** Aneurysmal Bone Cyst, Diaphysis, Radius

### Introduction

The nature, character, and optimal treatment of aneurysmal bone cysts remain unclear.<sup>1</sup> The lesion was first described by Jaffe and Lichtenstein in 1942, was subsequently further defined by both of these authors, and became known as Jaffe-Lichtenstein disease.<sup>1,2,3</sup> The lesions are more common in patients in the first two decades of life.<sup>2,3</sup> The aneurysmal bone cyst is more frequent in females than males. The major sites of occurrence are the femur, tibia, humerus, spine, and pelvis, and although tumors arising in the small bones of the hands and feet are seen occasionally.<sup>4,5</sup>

### Case report

A 22 year old female presented in the outpatient department with the history of swelling in the left forearm for past four months which has been increasing gradually. There was no history of loss of motion of the joint.

Examination revealed a swelling on the middle of the lateral aspect of forearm firm in consistency.

Radiological examination shows an eccentrically placed osteolytic lesion in the diaphysis with ballooning of the cortex.

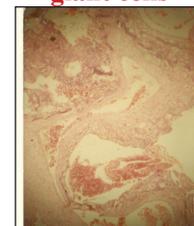
Histopathological examination confirmed the diagnosis of aneurysmal bone cyst.

We had done curettage with bone grafting. After 4 years of follow up there is no evidence of recurrence.

**Figure 1:**  
Aneurysmal bone cyst of diaphysis of radius



**Figure 2:**  
25 x HE stained showing aneurysmal spaces lined with haemosiderin laden giant cells



## Discussion

Aneurysmal bone cyst has been defined as an expanding osteolytic lesion consisting of blood filled space of variable size separated by connective tissue and osteoclast giant cells.<sup>1</sup> Before 1942 aneurysmal bone cyst was regarded as a variant of giant cell tumor of bone. In 1942 Jaffe and Lichtenstein used the term “aneurysmal bone cyst” have been found in most bones of skeleton but Jaffe stated that over three quarters occur in spine and long bones.<sup>2,3,4</sup> Tibia is the commonest site followed by femur. Lesion usually occurs in metaphysis in long bones and extends in adult life to the subarticular areas. The lesion is usually eccentric.

Dabska had reviewed 193 case of aneurysmal bone cyst by various authors and he had found 3 cases in radius metaphysis but none in diaphysis.<sup>6</sup>

Ruiter D J in his study of 105 cases of aneurysmal bone cyst had found only 1 case involving the radius diaphysis.<sup>7</sup>

Bonakderpour in 75 cases of aneurysmal bone cyst had found only 2 case involvement the radius and that to in metaphysis.<sup>8</sup>

Shaw et al 1975 in reviewing 25 cases of aneurysmal bone cyst in rare sites in Indian subcontinent by various authors had found radius to be a rare site with involvement in only 3 cases.<sup>9</sup>

Aneurysmal bone cyst of radius is a very rare entity and its involvement of diaphysis was still rarer.

Lesion in our case had typical features of an aneurysmal bone cyst eccentric in location but only the site was diaphysis. In our centre out of 55 cases of aneurysmal bone cyst we had found 1 case of radial diaphysis involvement.

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