Giant Cell Tumour of Patella

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Abstract

Tumours of Patella are rare. Giant Cell Tumour comprises the majority of the patellar tumours. A case of Giant Cell tumour of patella in a 65 year old lady who presented with history of a trivial fall is reported.

The diagnosis was confirmed by a core biopsy. The patient was treated with total patellectomy including a rim of normal tissue. Quadriceps was repaired. Patellectomy has been recommended as the preferred treatment for aggressive benign and stage IA malignant lesions in the literature.

Keywords: Giant Cell Tumour, patella, total patellectomy

A 65 year old lady presented to the out patient department with a history of trivial trauma. She had pain and swelling over the right knee. She was a diabetic patient on oral hypoglycaemic drugs.

Local examination showed swelling and crepitus. Range of motion of the knee was restricted. X-rays of the Patella showed a lytic lesion of the patella (Figure 1, 2).

A radiograph of chest and skull was taken to rule out any metastasis. Patient was investigated to rule out Brown Tumor. Serum Calcium, Serum Phosphate and Alkaline phosphatase were all in normal range. Excluding fasting blood

Figures 1 and 2: X rays of the knee (AP and Lateral view) showing a lytic lesion of the patella
sugar which was 210 mg/dl all other investigative parameters were within normal limits.

A core biopsy was taken and sent for histopathology examination. The report came as Giant Cell Tumor (Figure 3). Patient was taken up for total patellectomy.

**Figure 3.** Histopathogy slide showing the characteristic giant cells.

**Surgical technique**
Patella was exposed through a longitudinal midline incision. The tumor was resected with a rim of healthy tissue. Total patellectomy was done. Quadriceps was repaired. Post operative period was uneventful.

**Discussion**
Tumors involving patella are known to be rare. In a review, Mercuri and Casadei could collect only 384 cases of patellar tumors (primary and secondary) reported in literature during entire twentieth century.

The majority (73%) of these tumors were benign (279 cases) with 126 Giant Cell tumors reported as the most frequent diagnosis. Giant Cell tumors can behave aggressively and pulmonary metastasis have been reported.

Potential complications include local recurrence and intra articular spread of tumor. We used wide local resection to reduce the chances of local recurrence.

This technique had the advantage of complete removal of tumor with minimal chances of spillage or contamination and resultant tumor recurrence. Patellectomy has been recommended as the preferred treatment for aggressive benign and stage IA malignant lesions.

**References**