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**Dr. Harshil Omprakash Panchal** Krishna Institute of Medical Science and Research Center, Karad, Maharashtra, India (Special Issue) "National Conference on Recent Developments in Orthopaedics Sciences (23-24<sup>th</sup> OCT, 2021)"

## Management of giant cell tumor around knee by curettage and bone grafting plus cementing: A prospective study

## Dr. Harshil Omprakash Panchal

## Abstract

**Introduction:** Giant cell tumour of bone (GCT) is amongst the benign tumours of the skeleton and quite rare too. Although it is as benign lesion of bone, GCTs can be destructive and recur locally in up to 50% of cases. Radiologic imaging is critical for accurate staging of GCT. Plain radiographs usually show a lytic lesion, with well defined margins. Computed tomography (CT) is important to define the extent of cortical destruction, whereas MRI can be useful to evaluate the invasion of soft tissues including neurovascular structures around the tumor. Various reconstruction techniques such as prosthesis, osteo-articular allografts, arthrodesis using autogenous bone grafts, vascularised fibular grafts, and Ilizarov techniques have been used. (12–15) The present study will take into consideration the treatment of giant cell tumour around knee with curettage and reconstruction with cementing and/or bone allo-grafting.

**Materials and Methods:** Total of 10 patients with Giant cell tumour around knee were selected, the purpose of the study was to evaluate the outcome of treatment of GCT by wide excision with "bone grafting and cementing". Functional outcome was evaluated using the Musculoskeletal Tumour Society (MSTS) scoring system.

**Results:** MSTS score was used to assess the outcome of patients in present study. 5 had excellent outcome, 1 patient had good outcome, 2 had moderate outcome, 1 patient reported fair outcome and 1 had poor outcome.

**Conclusion:** We recommended an wide-ranging curettage with mutual grafting of the cement and bone. This reconstruction selection decreased the hazard of mechanical failure in the knee when fewer subchondral bone layer continued, especially on the femur.

Keywords: Management, giant cell tumor, prospective study

**Corresponding Author: Dr. Harshil Omprakash Panchal** Krishna Institute of Medical Science and Research Center, Karad, Maharashtra, India