

**FC-125****Argon beam and high speed bur as adjuvants in the treatment of low grade cartilage tumors****M. Galli Serra**, M.J. Portillo Franco, W.M. Parizzia*Hospital Universitario Austral, Buenos Aires, Argentina*

Introduction: Intralesional treatment by curettage and different adjuvants for low grade condrosarcoma and enchondromas of uncertain malignancy without cortical breakage and soft tissue extension has been proposed in the last years as an alternative therapy. In the same way Argon beam and high speed bur have shown good results in terms of local recurrence and complications when they are used as adjuvant in the treatment of benign aggressive tumors. We made a retrospective evaluation of a series of patients who were treated for, Grade 1 chondrosarcomas and enchondromas of uncertain malignancy, by curettage, argon beam, high speed burr, and bone grafting.

Material and Methods: We retrospectively reviewed the record of 29 patients treated at our institution by curettage, argon beam, high speed bur and bone grafting since 2007 for cartilage tumors. 12 tumors were located at the humerus, 8 at the femur, 4 at the phalanx and 1 at the acetabulum, tibia, fibula and metacarpal. Patients were followed up for a minimum of 6 months (range 4 years-6 months) for evidence of local recurrence, fractures or any other complication. There were 11 males and 17 females. The average age at treatment was 44 years old. All patients were evaluated with the Musculoskeletal Tumor Society Score (MSTS).

Results: We had no local recurrence in this series of patients and no evidence of metastatic disease. 12 (42%) of the patients had internal fixation during the initial surgery in order to prevent the risk of fracture. We had 2 complications, 1 patient had a fracture at the proximal humerus, after a trauma in the first 3 months postoperatively, he had not received internal fixation during the initial surgery. One patient had allograft reabsorption on the phalanx and needed reoperation. The mean MSTS score was 28,85 at the latest follow-up. No patients were lost to follow-up.

Conclusion: Our observation showed that Argon beam coagulation and high speed burr used as adjuvants in the treatment of low grade condrosarcoma and enchondromas of uncertain malignancy are a reasonable alternative with a low rate of complications and excellent functional results.