

**Treatment Outcomes Of Grade 2 Chondrosarcoma In Our Hospital And The Potential For Reconstruction
Using Frozen Autografts**

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Background:

To our knowledge, there are few reports of treatment outcomes for grade 2 chondrosarcoma.

Purposes:

We describe the outcomes of patients treated for grade 2 chondrosarcoma at our hospital and assessed the potential of frozen autographs for reconstruction.

Methods & Materials:

Fourteen patients with grade 2 chondrosarcomas (male: 9, female: 5, mean follow-up: 50.6 months) diagnosed from 2003 to 2014 were studied. We analyzed the clinical features, treatment methods, and treatment outcomes in the studied patients and assessed the benefits of frozen autographs for reconstruction.

Results:

Wide excisions were made at the base of all tumors. The outcomes were CDF in five, NED in two, AWD in five, and DOD in two patients. Six patients had local recurrences. Two had pelvic chondrosarcomas, two had secondary chondrosarcomas, one had a whole femur chondrosarcoma, and one had undergone multiple operations at a previous hospital. Lung metastasis was present in five patients and was discovered in three of the five patients after the first operation. Seven patients underwent reconstruction using frozen bone autografts, and the ISOLS/MSTS score was excellent in five of the seven patients.

Conclusions:

In our hospital, because there are many pelvic and extensive outbreak cases for which reconstruction after excision is difficult, reconstruction using frozen autografts is often performed. This helps in the reconstruction of different bones, including those of the pelvis. Recurrence probably occurs because of positive margins because of intra-articular and pelvic permeation. If we overcome that, recurrent rate may fall, and better outcomes are provided.