

Arthroscopic repair of delaminated acetabular articular cartilage using fibrin adhesive. Results at one to three years.

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Abstract:

We describe one-to three-year results of a novel use of fibrin glue in the treatment of cartilage damage by arthroscopy in the hip. This technique uses the microfracture technique and fibrin adhesive to bond delaminated articular cartilage to the underlying subchondral bone. This is generally performed in conjunction with treatment of underlying pathology such as femoroacetabular impingement. Patients were assessed using the modified Harris Hip Score (MHHS) pre-and post-operatively, and statistical significance determined by Student's t-test. We report the mid-term results of 43 patients with femoroacetabular impingement who have undergone this technique for re-attachment of delaminated chondral flaps. There was a statistically significant improvement in MHHS at a mean of 28 months (16 to 42 months) after surgery ($p < 0.0001$). The MHHS for pain improved significantly from 21.8 (95% CI 19.0 to 24.7) pre-operatively to 35.8 (95% CI 32.6 to 38.9) post-operatively ($p < 0.0001$). The MHHS for function also showed significant, although more modest, improvements from 40.0 (95% CI 37.7 to 42.3) preoperatively to 43.6 (95% CI 41.4 to 45.8) post-operatively ($p = 0.0006$). There were three patients who had early (within 12 months of the index procedure) revision arthroscopy for iliopsoas pathology. Arthroscopic repair of delaminated acetabular articular cartilage using fibrin adhesive is a useful technique in the treatment of early cartilage damage. We have seen encouraging mid-term results, although further studies are warranted. © 2011 Wichtig Editore.