COBLATION™ technology results in faster patient recovery than mechanical debridement (MD)

Patients reported significantly less knee pain at all time points up to one year

Study design

- Sixty patients with grade III medial-femoral cartilage defects undergoing medial meniscectomy with concomitant chondroplasty were randomised to treatment with COBLATION bipolar radiofrequency technology (mean age, 42.9 years) or MD with a shaver (mean age, 43.7 years)
- Follow-up occurred at one week, six weeks and one year

Key results

- Compared with patients receiving MD, those treated with COBLATION experienced:
  - Significantly less pain at all follow-up points (Figure)
  - 91% reduction in the relative risk of taking non-steroidal anti-inflammatory medications at one year (23 vs 2%; p=0.026)
  - 24% faster return to work (21.7 vs 16.4 days; p=0.002)
  - 35% less physical therapy sessions (9.8 vs 6.4 units; p=0.04)
  - Significantly better Knee and Osteoarthritis Outcome Score (57.3 vs 81.2; p<0.001) and Tegner scores (2.8 vs 4.1; p<0.001) at one year

Conclusion

Patients treated with COBLATION demonstrated faster recovery from arthroscopy than with MD. The authors concluded that COBLATION technology appears to be an effective treatment for debriding chondral fibrillations and may even have the potential to stabilise the defect.

Study citation