# Evidence in focus

Publication summary

Spahn G, et al. *Arthroscopy* (2010)*

smith&nephew

Supporting healthcare professionals for over 150 years

## COBLATION◇ technology results in significantly fewer revision or replacement surgeries than mechanical debridement (MD)

Patients with COBLATION-treated grade III articular cartilage lesions also experienced significantly better clinical outcomes

### Study design

- Sixty patients with grade III medial-femoral cartilage defects undergoing medial meniscectomy with concomitant chondroplasty were randomized to treatment with COBLATION bipolar radiofrequency technology or MD with a shaver
- Follow up occurred at four years; with two patients lost to follow up, 18 patients had undergone revision surgeries and 40 were reviewed

### Key results

- A significantly higher proportion of revisions for persistent knee problems occurred in the MD group ($p < 0.01$; Figure)
- Of the patients that did not require revision or replacement surgery (n = 40), those receiving COBLATION had statistically significant improvements compared with MD for:
  - Knee and Osteoarthritis Outcome Score: 71.8 vs 53.2 ($p < 0.001$)
  - Tegner Score: 4.5 vs 3.3 ($p = 0.005$)
- Varus angle on standing was significantly higher in the MD group: 2.3 vs 4.0 ($p < 0.001$)

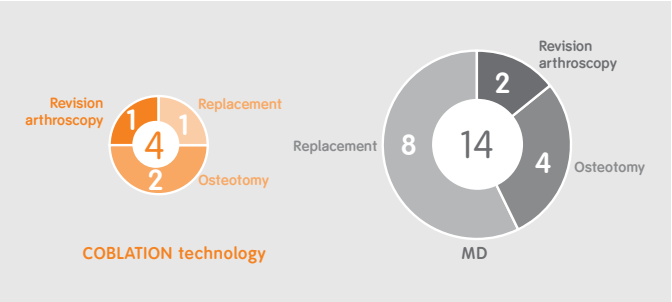


Figure. Revision, by operation type

### Conclusion

**Compared with conventional MD, COBLATION chondroplasty resulted in fewer revision or replacement surgeries and better outcomes for the remaining patients.**

### Considerations

- Both groups were comparable in baseline characteristics

### Study citation


*Spahn G, Klinger HM, Mückley T, Hofmann GO. Four-year results from a randomised controlled study of knee chondroplasty with concomitant medial meniscectomy: mechanical debridement versus radiofrequency chondroplasty. *Arthroscopy*. 2010 Sep;26(9 Suppl):S73-80.



13210-en V1 0118. Published January 2018,



www.smith-nephew.com