

Reply to the Letter to the Editor

Dear Sir,

Re: Arthroscopic triangular fibrocartilage complex debridement using radiofrequency probes. *Journal of Hand Surgery*, 30B: 638–642, 2005.

In response to the letter by Drs Sorene and Lunn, we would like to point out the following. Our article on TFCC debridement using radiofrequency (RF) probes focused on the use of these devices as a small in size, technically simple and effective alternative to mechanized resectors for debridement during wrist arthroscopy. The possibility of the creation of a more stable rim due to the thermal shrinkage of the periphery of the tissue treated is a secondary effect and may, or may not, affect the longevity of the debridement.

With regards to the thermal shrinkage effect of the RF probe application per se, we have published on arthroscopic debridement and thermal shrinkage for Geissler grade I and II partial scapholunate ligament lesions (Darlis et al., 2005). We found no evidence of radiographic deterioration at a mean follow-up of 19 months.

The efficacy of thermal capsular shrinkage of the shoulder joint continues to be questioned in recent literature (D'Alessandro et al., 2004; Chen et al., 2005). Concerns about creep and reduced elasticity have been voiced in experimental studies as well (Hayashi and Markel, 2001; Wallace et al., 2000, 2002). The extent to which these phenomena occur is influenced by the type of tissue treated, the amount and duration of thermal energy delivery and the extent of tissue shrinkage. Fortunately, these changes in biomechanical properties seem to be reversible and the recovery period is reported to be between 2 and 12 weeks (Medvecky et al., 2001; Wallace et al., 2000) in the experimental setting. It is thus important to protect the thermally treated tissues from overloading during the first postoperative weeks.

The differences in the biomechanics of the shoulder compared to the wrist joint in conjunction with the

differences in type of tissue treated (capsular versus ligamentous) and in postoperative immobilization make comparisons of thermal shrinkage in the two joints inappropriate.

We agree that further research is still needed in order to evaluate the efficacy of thermal shrinkage for the wrist and caution must be exercised. However, the technique should not be condemned at its birth because of comparison with its application in shoulder surgery.

References

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