

The Role of Arthroscopic Debridement in Knee Osteoarthritis

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Purpose of Study

To evaluate the efficacy of the arthroscopic debridement in osteoarthritic knee and define the indication

Materials and Methods

Arthroscopic debridement in osteoarthritic knee involves debridement of articular cartilage with shaver or other cutting instrument, thermal shrinkage, removal of spur, partial meniscectomy and local or complete synovectomy. Drilling or recently microfracture can be added in severe partial articular cartilage damage. For the eburnation OATS, ACI or other reconstructive surgery may be performed in addition to the debridement. Author evaluate the results of partial meniscectomy(352 knees), OATS(34 knees), ACI (16 knees), microfracture(52 knees), drilling(11 knees) and/or arthroscopic total or partial synovectomy(72 knees), in which arthroscopic debridement of the articular cartilage was performed together. Preoperative weight bearing x-ray, MRI including fat suppressed 3D SPGR MR imaging were taken before and after operation. Patient's subjective and objective findings were also evaluated. Follow up period was 2 to 21 years.

Results

- 1) Jackson's arthroscopic grade II or III and Disler's MRI grade II or III were main target of debridement. The results showed improvement of pain and function after operation.
- 2) The thermal shrinkage may worsen the result unless it was applied superficially. Shaving with shaver and pituitary rongeur was safer than thermal shrinkage.
- 3) Removal of spur of anteromedial portion of tibia and femur may lessen joint line tenderness.
- 4) Removal of spur of inferior and lateral facet of the patella together with local or anterior synovectomy may lessen patellar tenderness and improve function.
- 5) The results of microfracture, OATS or ACI used in severe partial(GIII) or full thickness defect

were unpredictable. It was favorable in valgus or less than 5 degrees varus deformity or after correction of varus with high tibial osteotomy.

Conclusion

Arthroscopic debridement of the articular cartilage can be a useful adjunct therapy in addition to the other procedures in mild or moderate osteoarthritis without severe malalignment of the knee.