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### Arthroscopic surgery for degenerative tears of the meniscus: A meta-analysis

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**Introduction:** Partial meniscectomy is one of the most commonly performed orthopaedic procedures. Controversy exists with regards to its efficacy in the setting of degenerative meniscal tears. This systematic review and meta-analysis evaluates the efficacy of arthroscopic partial meniscectomy in the setting of mild to no concurrent osteoarthritis of the knee in comparison to non-operative or sham treatments.

**Methods:** Two reviewers independently screened MEDLINE, EMBASE, PUBMED and Cochrane databases for all eligible studies. Only randomized control trials published from 1946 through to Jan 2014 were included. A risk of bias assessment was conducted for all included studies and outcomes were pooled using a random effects model. Outcomes were dichotomized to short-term (<6 months) and long-term (<2 years) data. The quality of the evidence was assessed and confidence in recommendations was developed according to the Grading of Recommendations Assessment, Development, and Evaluation (GRADE) approach.

**Results:** Seven randomized control trials were included in this review. Six of the seven included studies had moderate to significant risk of bias. The pooled treatment effect across studies did not demonstrate a statistically significant or minimally patient important difference (MID) between treatment arms for functional outcomes (SMD 0.07, 95% CI -0.10 to 0.23,  $p=0.43$ ) ( $I^2=20\%$ ) or pain relief (MD=-0.06, 95% CI -0.28, 0.15,  $p=0.57$ ,  $I^2=0\%$ ) at two years. Short-term functional outcomes between groups were statistically significant but did not exceed the threshold for MID. (SMD 0.25, 95% CI 0.02 to 0.48,  $p=0.04$ ). ( $I^2=56\%$ ) A priori subgroup analysis related to conservative treatment resulted in substantial decrease in heterogeneity. Sensitivity analyses related to sample size and missing data did not have a significant effect on treatment effect.

**Conclusions:** According to the GRADE approach, there is moderate evidence to suggest there is no benefit of arthroscopic partial meniscectomy for degenerative meniscal tears in comparison to non-operative or sham treatments for individuals with mild or no concomitant osteoarthritis. A trial of non-operative management should be the first line treatment in such individuals. Future research into identifying indications and ideal patient selection is required with regards to prognostic factors, which may influence outcomes following surgical and conservative treatment.

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### Systematic review and audit of our series of intracapsular fracture fixation using a new implant; targon plate system with tips, learned from our experience

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The two most commonly used implants for the fixation of intra-capsular fractures of the neck of the femur are the multiple parallel screw method and the sliding hip screw method. The sliding screw allowed for collapse of the bone at the fracture site and the multiple screw technique allowed for rotational stability. These two implants have been compared in their various features in six randomised trials using 772 participants. With sliding screws the incidence of fracture healing complications were lower (28% versus 33%). The sliding hip screw was associated with more wound healing complications probably due to the slightly longer time needed for the procedure. The Targon is a design which incorporates the advantageous features of both implants. This device provides the rotational stability and the lateral support. The implant is Magnetic Resonance Imaging compatible. Our series in a district general hospital involves 09 cases performed over a period of 10 months. The average operating time is 45 minutes and the average follow up period is 6 weeks. We found that removing the handle of the jig helps to manoeuvre the jig more easily especially in the case of obese patients. We conclude from our limited experience that Targon device appears to be a promising implant in the treatment of intra-capsular fractures of the femur.

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