

<h1>Prospective long-term outcomes of the medial collagen meniscus implant versus partial medial meniscectomy: a 20-year follow-up study</h1>

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INTRODUCTION:

The collagen meniscal implant (CMI) is a biologic scaffold that could be used to replace the meniscus host tissue after partial meniscectomy. The short-term results of this procedure have already been described, however, there is a paucity of comparative long-term studies.

The aim of the study was to compare the clinical outcomes, failures and osteoarthritis progression of patients who underwent partial medial meniscectomy and partial meniscus scaffold implantation.

METHODS:

Thirty-six nonconsecutive patients with medial meniscus injuries underwent medial CMI (MCMI) implantation or partial medial meniscectomy (MM) between 1997 and 2000 and were included in a prospective study with an intermediate 10 year follow-up examination. Outcome measures at the last follow-up included the Lysholm score, visual analog scale (VAS) for pain, International Knee Documentation Committee (IKDC) knee form, and Tegner activity level. Bilateral weightbearing radiographs were also completed at final follow-up. Data regarding complications and failures were collected.

RESULTS:

At the final follow-up, 30 patients (15 MCMI, 15 MM, 83% follow-up rate) were included in the final analysis at a minimum 20 years of follow-up. Two failures (1 per group) were reported: 1 Total Knee Arthroplasty and one medial meniscus transplant, therefore, the survival rate of the CMI was 93%.

When comparing the clinical results of the two groups, no difference was found considering the Lysholm score ($p=0.86$), KOOS subscales ($p= 0.45 - 0.92$), Tegner ($p=0.29$) and the IKDC ($p=0.70$). Moreover, 17 patients underwent Radiographic examination (7 MCMI, 10 MM) and no significant difference was reported with respect of the presence and incidence of Osteoarthritis between the two groups.

DISCUSSION AND CONCLUSION:

The CMI implant for partial medial meniscectomy provided good long-term results and a low failure rate. However, differently from the 10 years follow-up, the clinical and the radiological outcomes were not superior compared to the medial meniscectomy group.