Does Obesity Negatively Affect the Functional Results of Arthroscopic Partial Meniscectomy? A Retrospective Cohort Study

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Purpose: The purpose of this study was to evaluate the impact of body mass index (BMI) on early functional results of patients who undergo isolated partial meniscectomy. **Methods:** The functional results for 1,090 patients who underwent partial meniscectomy, in 2 different orthopaedic clinics, were evaluated retrospectively. The study includes cases with arthroscopic partial meniscectomy for isolated meniscal tears; patients with concomitant knee pathology were excluded. Three hundred forty-one (31%) patients with isolated lateral meniscal tears, 628 (58%) patients with isolated medial meniscal tears, and 121 (11%) patients with both medial and lateral meniscal tears underwent arthroscopic partial meniscectomy. We divided these patients into 3 subgroups on the basis of their BMI; <26, between 26 and 30, ≥30. Preoperative functional results were compared with 1-year postoperative follow-up results using the International Knee Documentation Committee (IKDC),[26] Lysholm Knee Scale,[27] and Oxford Scoring System[28] scores. **Results:** According to all 3 knee scales, age, side of lesion, and tear type had no effect on functional outcome. When compared with the group with BMI <26, the patients with BMI between 26 and 30 and the patients with BMI ≥30 had significantly worse outcomes as measured by the IKDC, Oxford Scoring System, and Lysholm Knee Scale scores. Patients with BMI between 26 and 30 and ≥30 did not have significantly different functional outcomes. **Conclusions:** Short-term outcomes after arthroscopic partial menisectomy reflect significant improvement in subjective outcome. However, patients with moderate or significant obesity (BMI >26) have inferior short-term outcomes compared with nonobese patients. **Level of Evidence:** Level IV, therapeutic case series.

Arthroscopic partial meniscectomy is a reliable and cost-effective method, and has high patient acceptance within the appropriate indications. This procedure yields consistently good early results with low morbidity and rapid return to good function of the knee joint.[1] Several studies on the functional outcome of arthroscopic partial meniscectomy indicate quite good long-term and short-term results.[2-5] Thus, arthroscopic partial meniscectomy has become one of the most common orthopaedic procedures in many centers. It is performed, with satisfactory results, for meniscal tears that are not suitable for repair.[1,6,7] After the importance of menisci to a functional knee joint became well understood, the repair of appropriate tears that have the potential to heal and the complete removal of irreparable tears while retaining as much functional meniscal tissue as possible[8-10] became the mainstay of meniscal surgery. Success in arthroscopic partial meniscectomy is influenced by age, gender, and type and location of meniscal tears, concomitant knee instability, and concomitant articular degenerative changes.[11,12]

Oblique, radial, degenerative, horizontal, or complex meniscal tears that are unstable and irreparable and are located within the white–white zone can be successfully managed with arthroscopic partial meniscectomy. It is important to excise only the unstable or damaged portion of the meniscus, leaving a well-contoure

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