

Does body mass index affect how well patients do after meniscus surgery?

Obesity is present in about 38% of adults in the United States, and as many as 67% of patients with knee injuries (including meniscus tears). Some research has shown that obese patients have worse function and more knee symptoms (e.g., pain) after meniscus surgery than normal weight patients. However, arthritis can also cause worsened pain and function after meniscus surgery, and obesity is associated with arthritis. This makes it challenging to untangle the effect that obesity alone has on the results of meniscus surgery. Importantly, no studies have examined how well obese patients *without* signs of knee osteoarthritis on X-rays do after meniscus surgery. We hypothesized that obese patients (BMI > 30) would do worse after meniscus surgery.

To answer this question, we took a second look at data from the ChAMP (Chondral Lesions And Meniscus Procedures) Trial which was designed to compare two methods for treating patients with chondral lesions (arthritis) during meniscus surgery: simple observation of the chondral lesion(s) versus debridement. Two hundred fifty six patients, without signs of knee osteoarthritis on X-rays, were followed for 1 year after meniscus surgery. We measured clinical and functional scores and range of motion before surgery and up to 1 year after surgery. These measures were then compared by BMI status (< 25, 25-30, > 30).

We found that 20% of patients were normal weight, 39% were overweight, and 41% were obese. Obese patients had worse pain and function *before* surgery compared to normal weight patients (BMI < 25), however there were no differences in pain or function at 1 year after surgery. The only difference at 1 year after surgery was in knee flexion (bending at the knee joint) which was reduced in obese patients compared to normal weight patients.

Our results suggest that if an obese patient has not developed arthritis, they can expect the same result after meniscus surgery as a patient of normal weight. Based on these findings, physicians can reassure patients undergoing meniscus surgery that their weight should not affect their short-term results after surgery.

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Publication

[The Effect of Body Mass Index on Clinical Outcomes in Patients Without Radiographic Evidence of Degenerative Joint Disease After Arthroscopic Partial Meniscectomy.](#)

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