

Repair of torn knee meniscus at the time of ACL reconstruction is safe and effective for children

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Eighty-four percent of children 18 and younger had successful clinical outcomes during an eight year follow-up to repair a torn meniscus (cartilage that provides cushioning to distribute your body weight across the knee joint) at the same time as reconstruction of the anterior cruciate ligament (ACL), according to a new study presented at the American Orthopaedic Society for Sports Medicine's Specialty Day in New Orleans, (March 13). The success of the meniscus repair, however, depended on whether the tear type was simple, complex or a "displaced bucket-handle," the study found.

"We have a wealth of information regarding adults who have a meniscus tear repaired at the time of ACL reconstruction, but there was very little data regarding the pediatric population," said Aaron Krych, chief resident, MD, Department of [Orthopedic Surgery](#) at the Mayo Clinic in Rochester, Minn. "To our knowledge this is the largest study reported on the pediatric population. These knee injuries are common in kids that play football, wrestling, and soccer."

In the study, 99 patients (18 or younger) had a meniscus repair at the time of an ACL reconstruction between 1990 and 2005. Overall, patients had a 74 percent success rate of their meniscus tear. Patients with simple tears (one major tear) had an 84 percent successful repair rate. The success rate decreased to 59 percent for displaced bucket-handle tears (a tear around the rim of the meniscus, causing the central portion to

displace into the joint) and 57 percent for complex tears (a tear that occurred in multiple planes). Two years after surgery, these patients had a freedom from failure rate of 90.9 percent; however, after 8 years, the rate decreased to 76.8 percent.

In evaluating knee function (limp, locking, instability, pain, swelling and trouble climbing stairs), the patients improved from a median score of 48 (in a range of 38-70) before surgery to 90 (range 52-100) after surgery. Rating the sporting activity level of patients on a scale of 0 - 10, with 10 being national elite competitive sports, and 0 being inability to perform daily activities, patients improved their activity level significantly to 6.2 from a 1.9.

Provided by American Orthopaedic Society for Sports Medicine

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