Incidence of subsequent injury to either knee within 5 years after anterior cruciate ligament reconstruction with patellar tendon autograft. Shelbourne KD, Haro M, Gray T. *Am J Sports Med.* (In Press)

ABSTRACT

Background: The risk of subsequent anterior cruciate ligament injury to either knee after surgery based on sex, age and activity has not been extensively studied.

Hypotheses: Women have a higher incidence of anterior cruciate ligament injury to the contralateral knee after surgery than men but do not have a difference in injuries to the reconstructed knee. Young competitive athletes have a higher incidence of injury than older patients. The time to return to full activities does not affect the injury rate.

Study Design: Descriptive Epidemiology Study

Methods: We prospectively followed 1820 patients after primary anterior cruciate ligament reconstruction to determine if patients suffered an injury to either knee within 5 years after surgery. Subsequent injury was evaluated based on gender, age, and activity level.

Results: Minimum 5-year follow-up was obtained on 1415 patients (78%). Seventy-five patients (5.3%) had an injury to the contralateral knee, 61 patients (4.3%) suffered an injury to the reconstructed knee (P=0.2185). Women suffered more injuries (7.8%) to the contralateral normal knee than men (3.7%); P<0.001), but not more injuries to the reconstructed knee (4.3% versus 4.1%; P=0.5543). The risk of subsequent injury to either knee was 17% for patients < 18 years old, 7% for patients 18 to 25, and 4% for patients >25. There was no difference in injury rate between patients who returned before and after 6 months postoperatively.

Conclusions: Women have a higher incidence of anterior cruciate ligament injury to the contralateral knee than men after reconstruction. The incidence of injury to either knee after reconstruction is associated with younger age and higher activity level, but returning to full activities before 6 months postoperatively does not increase the risk of subsequent injury.