

Nonmodifiable risk factors for anterior cruciate ligament injury.

Meghan Price, Maria Tuca, Frank Cordasco y Daniel Green.

Abstract

PURPOSE OF REVIEW: As anterior cruciate ligament (ACL) injury is becoming increasingly prevalent in the population of active children and young adolescents, it is crucial to be aware of both the modifiable and nonmodifiable factors that place this population at increased ACL injury risk. Historically, there has not been a definitive consensus on all of these risk factors-particularly the nonmodifiable ones.

RECENT FINDINGS: The present review has accumulated the most recent evidence for the nonmodifiable risk factors in ACL injury focusing particularly on female gender, generalized joint laxity, knee recurvatum, increased lateral tibial slope, decreased intercondylar notch width, structural lower extremity valgus, limb length discrepancy, family history, and history of contralateral knee ACL injury.

SUMMARY: Physicians should be aware of the nonmodifiable risk factors for ACL tears in active children and adolescents and should also encourage avoidance of modifiable risk factors in this population. Young athletes with nonmodifiable risk factors are at a particularly increased risk of recurrent injury following ACL reconstruction (ACLR). We believe that a primary extra-articular augmentation via iliotibial band tenodesis at the same time of ACLR may decrease the rate of reinjury for the high risk athlete with multiple nonmodifiable risk factors.