ACL injuries increase among school-aged children and adolescents

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A new study confirms what doctors working with young athletes already suspected: the number of anterior cruciate ligament (ACL) tears among youths, particularly high school students, has risen during the past 20 years.

The study, to be presented at the 2015 American Academy of Pediatrics (AAP) National Conference & Exhibition in Washington, DC, reviewed an insurance company's 1994-2013 billing data within a large metropolitan network. Researchers found the overall incidence of ACL tears among 6- to 18-year-old patients increased by 2.3 percent per year.

Breaking down the increase based on gender, the study found that males had an overall increase of 2.2 percent per year and experienced peak rates of ACL tears at age 17. Females, meanwhile, saw an increase of 2.5 percent per year and experienced most ACL tears at age 16. All female age groups showed an increased incidence of ACL tears over the past 20 years, but among males, only the 15- to 16-year-olds had a significant rise.

"We hope these findings will help foster discussion both about how changes in pediatric athletic participation over the past 20 years may be impacting injury rates and how we can best develop injury prevention programs and athletic participation guidelines," said Marc A. Tompkins, MD, an assistant professor of orthopaedic surgery at the University of Minnesota. "The data would suggest, for example, that all female athletes and males in the 15-16 year ages would be good candidates for injury prevention programs," he said.

The researchers also calculated the rate of ACL tears surgically reconstructed and found that it increased by 3 percent per year over the study period.

More information: Nicholas A. Beck, MD, an orthopaedic surgery resident at the University of Minnesota and the study's lead author, will present the abstract, "ACL Tears in School-Aged Children and Adolescents: Has There Been an Increased Incidence over the Last 20 Years?" at 9:50 pm on Saturday, Oct. 24 in the Walter E. Washington Convention Center. To view the abstract, aap.confex.com/aap/2015/webprod ... nary/Paper29890.html

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