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## Study Shows Young Patients May Benefit from Microfracture Knee Procedures

*Surgical treatment using microfracture for pediatric knee injury repair may improve activity outcomes, according to research presented at the American Orthopaedic Society for Sports Medicine's Specialty Day in San Diego (Feb. 19). The study shows patients are able to regain function and return to a normal activity level following surgery and rehabilitation.*

"Our study focused on patients with articular cartilage injuries to the knee, which can be a debilitating source of pain and a strong limitation to function in pediatric patients," said lead researcher, Richard Steadman, MD, Founder, Steadman Philippon Research Institute. "Articular cartilage defects are known to increase the risk of developing osteoarthritis and so it is advisable to treat the defect in order to minimize future joint disorders. Using microfracture might be one way to treat these issues."

Microfracture is a technique surgeons use to remove damaged cartilage and increase blood flow from the underlying bone. Holes made in the affected area allow the formation of new, healthy cartilage.

The study examined 26 patients (12 men and 14 women between the ages of 12-18 years) with articular cartilage

knee defects. All patients were diagnosed with a standard knee arthroscopy procedure (small device inserted into a joint through a cut) and then treated with microfracture holes placed 3 to 4 mm in depth. Patients were evaluated for knee function (limp, support, stair climbing, squatting, instability, swelling, pain, locking) and reported an average function score of 90 (in a range of 50-100). Patients' reported a median activity level of a 6 (in a range of 2-10), demonstrating ease in recreational activities following surgery.

"This is a good first step in learning about the overall outcome of this procedure on pediatric patients," said Steadman. "While we have limited data on this specific population, we have seen this procedure be effective in young athletes, who share similarly active lifestyles. This study confirms what we have already seen in this group."