

Tackling the ACL Tear Epidemic in Youth Athletes: A Promising Solution from Arthrex

ACL reconstruction with Arthrex's [InternalBrace™ technique](#) proven to reduce retears by up to 80% in young athletes¹

(NAPLES, Florida — Dec. 16, 2024) — Arthrex, a global leader in minimally invasive surgical technology, announces new research that shows its cutting-edge ACL reconstruction (ACLR) using the *InternalBrace*™ technique offers an effective solution to combat reinjuries for young athletes.²

"This research is significant as the number of adolescent athletes suffering from anterior cruciate ligament (ACL) injuries continues to rise," said Jake Jolly, Senior Director of Product Management, Knee and Hip Arthroscopy. "Although ACLR is largely considered a successful operation, the chance of younger patients retearing their reconstructed ACL can be as high as 20% to 30%." ^{3,4}

Several new studies confirm that the *InternalBrace* technique significantly reduces the rate of reinjuring, or retearing, a surgically reconstructed ACL. [Patrick A. Smith, MD](#) (Naples, Florida), a specialist in adolescent ACLR and ACL repair using the *InternalBrace* technique, and colleagues found an 88% reduction in the risk of ACL retears for younger patients who received the *InternalBrace* technique (1%) compared to those whose procedures did not include the technique (8%), ² with outcomes assessed at a minimum of 2 years in one study and 5 years in another⁵.

In another study with adolescent patients who received a quadriceps tendon graft combined with the *InternalBrace* technique, Dr. Smith and colleagues found zero graft retears and a high return to sport (90%).⁶ Gordon Mackay, MD (Glasgow, UK), and colleagues also found a low re-tear rate of 1.1% in their patient population, with outcomes assessed at a 5-year follow-up.⁷

"The *InternalBrace* technique, also known as 'suture tape augmentation,' uses a high-strength tape suture to protect an ACL reconstruction during the postoperative rehabilitation period," Jolly said. "The tape lies alongside the ACL reconstruction graft and acts as a seat belt to protect the graft from stretching too far or retearing as the patient returns to sports and activities."

According to the National ACL Injury Coalition, ACL injuries among high school athletes have surged by nearly 26% over the past 15 years.⁸ Soccer, basketball and lacrosse are among the top sports for ACL injuries in girls, while football, lacrosse and soccer lead for boys. Additionally, a recent study from the *Orthopedic Journal of Sports Medicine* found that 2.4% of boys and 2.0% of girls aged 9-15 suffered from ACL injuries, highlighting a significant concern within the youth population.⁸

Not only are ACL injuries rising among adolescent athletes, but research has shown that younger athletes who undergo ACLR and return to sports too quickly face an even higher risk of reinjury,³ which can result in costly treatment, extended rehabilitation and the possibility of long-term impairment. Fortunately, there are procedures and supplemental treatment options, such as the Arthrex *InternalBrace* technique, that may help improve the outcome of an ACLR.

"As knee surgeons, all of us have a goal of never having the patient reinjure that initial reconstruction, and the *InternalBrace* procedure is a very simple way to get us close to that goal," Dr. Smith said.

Patients can find valuable information at [ACL Tear.com](#), a website that illustrates the science of ACL injuries, highlights the benefits of advanced knee preservation techniques and offers an interactive "[Find a Doctor](#)" tool to quickly and easily connect with a surgeon.

"Studies confirm there are approximately 400,000 ACL reconstructions performed every year in the United States, and we believe it's crucial for patients to be empowered and informed about the surgical options available to enhance their recovery," ⁹ Jolly added.

For more information, downloadable multimedia assets and interview requests for subject matter experts, contact Arthrex Media Relations at media@arthrex.com.

References

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The *InternalBrace* surgical technique is intended only to augment the primary repair/reconstruction by expanding the area of tissue approximation during the healing period and is not intended as a replacement for the native ligament. The *InternalBrace* technique is for use during soft tissue-to-bone fixation procedures and is not cleared for bone-to-bone fixation.

About Arthrex

Arthrex, headquartered in Naples, Florida, is a global medical device company and leader in multispecialty minimally invasive surgical technology innovation, scientific research, manufacturing and medical education. The company has pioneered the field of arthroscopy and sports medicine and develops more than 1,000 new products and related procedures annually to advance minimally invasive orthopedic surgery, trauma, spine, cardiothoracic, orthobiologics and arthroplasty innovation worldwide. Arthrex also specializes in the latest 4K multispecialty surgical visualization and OR integration technology solutions. For more information, visit [Arthrex.com](https://www.Arthrex.com).

Additional assets available online:  **Photos** ⁽¹⁾

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