

The Arthrex®

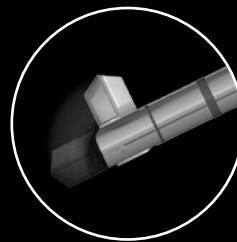
# ACL TightRope®

*Advanced ACL/PCL Graft Fixation with  
Unparalleled Clinical Outcome Validation*

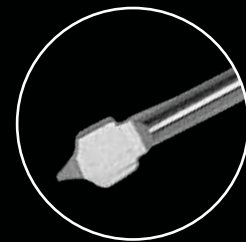
ACL TightRope RT

- Over 1 million implanted\*
- Multiple published studies with excellent biomechanical and clinical results\*\*
- Multiple implant options for femoral, tibial, ACL and PCL fixation for all graft types
- First of its kind Spade Tip Drill Pin and FlipCutter® simplify techniques and facilitate innovative, anatomic and minimally invasive constructs

\*data on file



FlipCutter



Spade Tip Drill Pin

## *Unmatched Versatility for all Knee Indications*

TightRope BTB

TightRope ABS

ACL TightRope DB

PCL TightRope

GraftLink®

Quad Tendon  
w/FiberTag®

## **\*\*Clinical Outcomes**

### **RetroConstruction™ Socket Drilling**

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Abebe ES, et al

***The Effects of Femoral Graft Placement on In Vivo Knee Kinematics after Anterior Cruciate Ligament Reconstruction.*** *J Biomech.* 2011;44(5):924-929. doi: 10.1016/j.jbiomech.2010.11.028.

- The knees from patients were tested 6-36 months out from surgery. All patients underwent MRI and biplanar fluoroscopy to measure in vivo kinematics during a lunge motion. Operative knees were compared with normal contralateral knees.
- Knees drilled with the transtibial technique had significantly more anterior translation, medial tibial translation and rotation than the normal knees and knees drilled with the RetroConstruction technique. Knees drilled with the RetroConstruction technique more closely reproduced normal knee function.

Lopes R, et al

***Does Retrograde Tibial Tunnel Drilling Decrease Subchondral Bone Lesions During ACL Reconstruction? A Prospective Trial Comparing Retrograde to Antegrade Technique.***

[Published online ahead of print January 8, 2016]. *Knee.* 2016;23(1):111-5. doi: 10.1016/j.knee.2015.09.010.

- A multi-center, prospective study of 43 patients, 15 with antegrade-drilled tibial tunnels and 28 with retrograde-drilled tibial tunnels. MRIs and pain were assessed during the first postoperative week.
- Tibial edema was significantly more frequent in the antegrade group. Tibial edema showed a correlation to early postoperative pain.

Lubowitz J, et al

***Randomized Controlled Trial Comparing All-inside Anterior Cruciate Ligament Reconstruction Technique with Anterior Cruciate Ligament Reconstruction with a Full Tibial Tunnel.***

*Arthroscopy.* 2013;29(7):1195-1200. doi: 10.1016/j.arthro.2013.04.009.

- All-inside ACL Reconstruction resulted in less postoperative pain and similar clinical outcomes than a full tunnel technique.

Okafor EC, et al

***The Effects of Femoral Graft Placement on Cartilage Thickness after Anterior Cruciate Ligament Reconstruction.*** *J Biomech.* 2014;47(1):96-101. doi: 10.1016/j.jbiomech.2013.10.003.

- Knees were imaged with high resolution MRI and the cartilage thickness was mapped through 3D modeling at a mean 18-20 months after ACLR.
- Patients' knees reconstructed with transtibial technique showed significantly decreased cartilage thickness compared to the normal contralateral knee and knees reconstructed with RetroConstruction technique. There was no significant difference between knees reconstructed with RetroConstruction technique and the normal contralateral knees.

### **\*ACL TightRope® Fixation**

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Boyle MJ, et al

***Does Adjustable-loop Femoral Cortical Suspension Loosen after Anterior Cruciate Ligament Reconstruction? A Retrospective Comparative Study.*** *Knee.* 2015 Sept;22(4):304-8.

- Adjustable-loop suspension does not clinically loosen after ACL reconstruction.
- No significant difference in postoperative knee stability or graft failure rate between adjustable-loop and fixed-loop femoral cortical suspension in patients undergoing primary ACL reconstruction.

Blackman AJ, et al

***All-inside Anterior Cruciate Ligament Reconstruction.*** *J Knee Surg.* 2014 Oct;27(5):347-52.

- Reports suggest similar results in early postoperative period when compared with traditional techniques.
- All-inside techniques offer the advantages of improved cosmesis, less postoperative pain, decreased bone removal, and gracilis preservation.

Benea H, et al

***Pain Evaluation after All-inside Anterior Cruciate Ligament Reconstruction and Short-term Functional Results of a Prospective Randomized Study.*** *Knee.* 2014 Jan;21(1):102-6.

- The results show that postoperative pain, knee stability, ranges of motion and transplant positioning were slightly better with the all-inside technique.
- The all-inside technique can be considered a valid, reliable procedure with very good results for pain, stability and knee function. The all-inside technique seems to be a promising future option as a minimally invasive technique.

Nawabi DH, et al

***Return to Play and Clinical Outcomes after All-inside, Anterior Cruciate Ligament Reconstruction in Skeletally Immature Athletes.*** *The Orthopaedic Journal of Sports Medicine,* 2(7)(suppl 2).

- An all-inside, physal-sparing ACL reconstruction technique using hamstring autograft demonstrates excellent subjective and objective clinical outcomes in skeletally immature athletes without growth disturbance.

