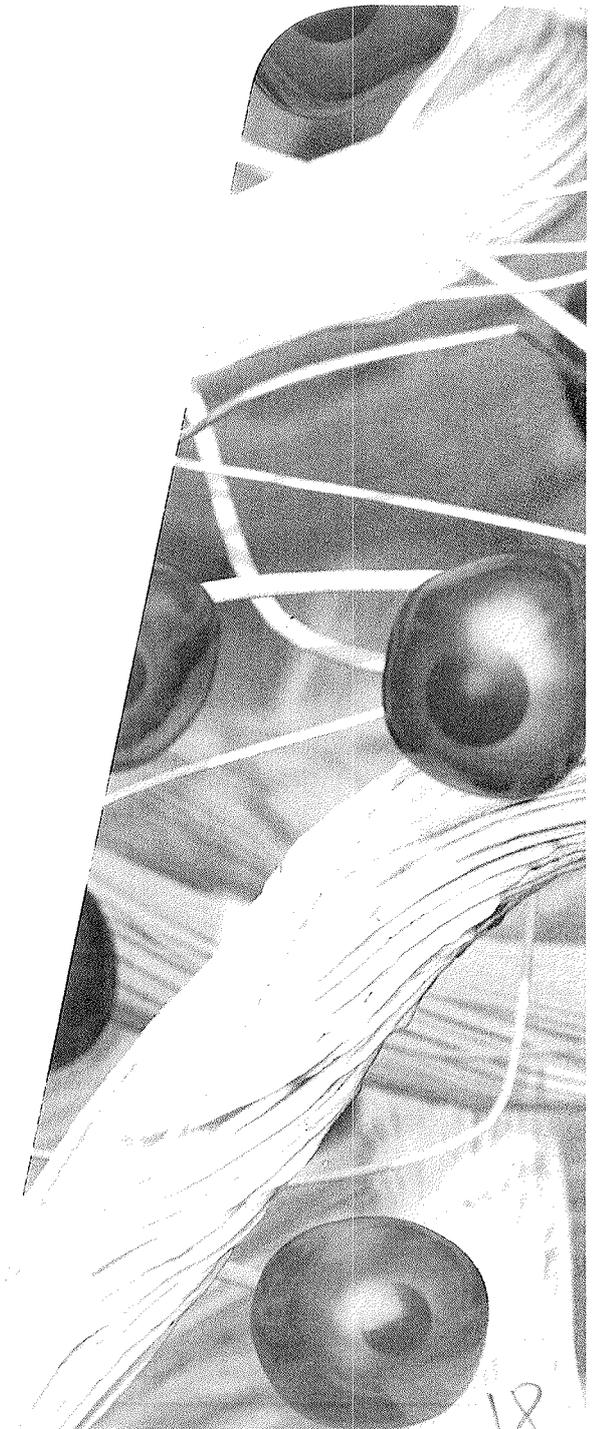


12. поцип
Besmerobuoipanti deishubisue
kolayuo membrane

Chondro-Gide®

The Surgeon's Choice
for Cartilage Regeneration

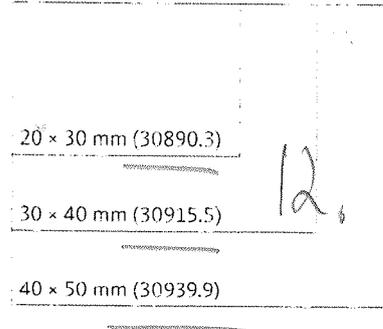


Safety and Quality

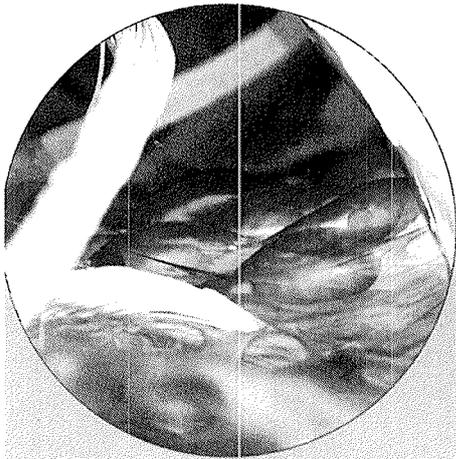
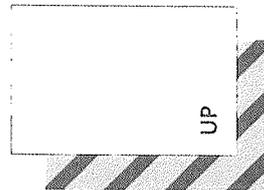
Chondro-Gide[®] is a CE-certified product that is manufactured according to a proprietary process developed and patented by Geistlich Pharma. As a privately held, fully integrated company, we oversee each step of the manufacturing process. A controlled production environment, rigorous in-process and end control ensure our ability to provide surgeons with a consistently high quality product they can rely on.

*Chondro-Gide[®] contains collagen: In very rare cases, allergies may occur.

Chondro-Gide[®] is available in three sizes:



A sterile aluminium template is included.



A Stable Environment for Regeneration

The chondrocytes continue to grow and produce an extracellular matrix on the Chondro-Gide[®] membrane. Over time, the Chondro-Gide[®] is resorbed and replaced by new cartilage.^{2,6}

TISSEEL [Fibrin Sealant] Kit (Freeze Dried) with DUPLOJECT System - 2 mL



For Topical Use Only

SKU: 1504514

Provides all components for reconstitution and delivery of fibrin sealant. Each TISSEEL [Fibrin Sealant] Kit with DUPLOJECT System contains 1 DUPLOJECT applicator, 2 joining pieces, 4 application cannula tips, 4 syringes, 4 needles, and the TISSEEL package insert. Topical Use Only - Do Not Inject. Available in 3 sizes. Single use. Sterile and non-pyrogenic.

Product Characteristics

Latex:	Not Made with Natural Rubber Latex
Concentration:	Rx Only
Package Insert Link:	baxterpi.com/pi-pdf/Tisse(..)

Carton

Pack Factor:	1
--------------	---

Website Links

www.tisseel.com
[baxterpi.com/pi-pdf/Tisse\(..\)](http://baxterpi.com/pi-pdf/Tisse(..))

Ordering information

Baxter Product Code:	1504514
UPN/GTIN CS Unit:	60309444301028
UPN/GTIN EA Unit:	00303384301023
National Drug Code:	0944430102
Unit of Measure:	Each

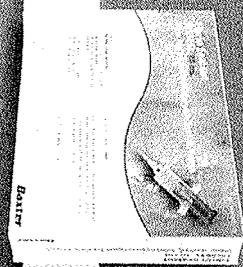
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Dr. Vadybinke
Med. Fakultät
Klinik für Chirurgie



TISSEEL
[Fibrin Sealant]

Ready to use * TISSEEL [Fibrin Sealant] - Quick Reference Guide



***3 Ways To Thaw The Frozen Pre-Filled Syringe | *Plan Ahead: Thaw up to 48 hours before use.**

1

maximum
99°F/37°C

- Thawing /warming - ON sterile field:**
Thawing/warming time: 33°C-37°C
- 2 mL in bath without pouch approximately 5 min.
 - 4 mL in bath without pouch approximately 5 min.
 - 10 mL in bath without pouch approximately 12 min.
- (Ensure the contents of the syringe remain submerged throughout thawing.)

2

maximum
99°F/37°C

- Thawing /warming - OFF sterile field:**
Thawing/warming times: 33°C-37°C
- 2 mL in bath with pouches approximately 50 min.
 - 4 mL in bath with pouches approximately 40 min.
 - 10 mL in bath with pouches approximately 80 min.
- (Ensure the pouches remain submerged throughout thawing.)

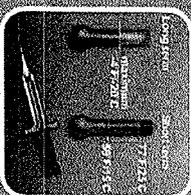
3

maximum
99°F/37°C

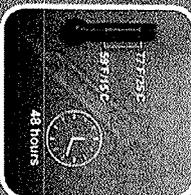
- Thawing /warming - OFF sterile field (in a box):**
Thawing/warming times: 33°C-37°C
- 2 mL in pouches approximately 40 min.
 - 4 mL in pouches approximately 85 min.
 - 10 mL in pouches approximately 105 min.
- DO NOT microwave.

Application of TISSEEL [Fibrin Sealant] must be completed within 4 hours of warming to 33°C-37°C or opening the package. Discard any unused product.

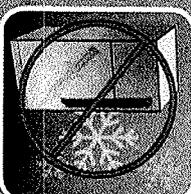
Product Storage



Long term: Store at $\leq 20^{\circ}\text{C}$. Short term: Unopened syringes may be stored for up to 48 hours at room temperature (13°C-25°C) after removal from the freezer.



If not used immediately: TISSEEL [Fibrin Sealant] total thawing and warming time cannot exceed 48 hours. After 48 hours, TISSEEL [Fibrin Sealant] cannot be used.



DO NOT REFRIGERATE: Once thawed, DO NOT refrigerate or refreeze. DO NOT expose to temperatures above 37°C. DO NOT use after the expiration date.

BioSurgery

Please see Important Safety Information on reverse.

Baxter

Л/р. вадыбынкі
Адела Раблініцка

Копія ліста

201

Complex Meniscus Tears Treated with Collagen Matrix Wrapping and Bone Marrow Blood Injection: A 2-Year Clinical Follow-Up

Cartilage
1-17
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sagepub.com/journalsPermissions.nav
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cart.sagepub.com


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Roland Jakob¹, Andrzej Szulc[†], Monika Grygorowicz¹, and Michał Słomczykowski²

Abstract

Objective. To collect and analyze the 2-year follow-up clinical and MRI results of patients treated with an arthroscopic technique of collagen membrane-based meniscus repair. **Design.** 53 consecutive patients with combined (horizontal and radial or longitudinal component) and complex meniscal tears (tear extended through avascular zones or/and composed with two or more morphological tear pattern) were treated with an “all-inside” arthroscopic suture of meniscus and wrapping with a collagen membrane (Chondro-Gide) technique with bone marrow blood injection. The IKDC 2000 subjective score, IKDC 2000 clinical evaluation score, Lysholm score and Barret clinical criteria of meniscal healing were recorded. All patients were examined by MRI 2 years postoperatively, using modified WORMS criteria for meniscal integrity. **Results.** The 2 year follow-up was achieved in 50 cases. Of these, 2 patients were excluded from the evaluation due to incomplete data and 2 patients underwent partial meniscectomy and were classified as failures. In 46 patients (86.8% of the intended to treat cases), a statistically significant improvement in IKDC 2000 subjective, Lysholm scores and IKDC 2000 clinical assessment between preoperative and the 2-year follow-up time points were observed. Barret criteria demonstrated an improved clinical outcome between pre- and post-operative values. MRI revealed a non-homogeneous signal without meniscal tear (WORMS grade 1) in 76% of the operated menisci (13% WORMS grade 2). **Conclusions.** The 2-year follow-up data demonstrate that this technique is safe and can offer an additional tool to save the meniscus in the patients otherwise scheduled for meniscal removal. Level of evidence IV

Keywords

meniscus wrapping, collagen membrane, arthroscopic, complex, combined

Introduction

Meniscal injuries located in the low or nonvascularized zones (red-white and white-white zones) are often treated with partial or total meniscectomy. Although meniscectomy is a relatively simple and quick surgery with good immediate postoperative clinical outcomes, the long-term results are poor.¹⁻³ These poor outcomes are not surprising since many studies have demonstrated the importance of the meniscus for the knee function.^{1,5-10} It has also been accepted that surgeons should preserve as much meniscal tissue as possible. Both complete and partial meniscectomy are associated with early degenerative osteoarthritis.⁷⁻¹¹ To preserve function of the knee joint, it is now suggested that meniscal tears should be treated by meniscal repair instead of meniscectomy whenever possible.^{1,2,6,9,12,13}

Various augmentation techniques for meniscal repair have been described. They include use of a fibrin clot, platelet-rich

plasma, pro-inflammatory cytokines, and application of growth factors.¹⁴⁻¹⁹ Further progress in meniscus healing has been made possible by the innovative use of cells and scaffolds.²⁰ Improved methods to isolate and concentrate mesenchymal stem cells from autologous sources (e.g., bone marrow or adipose tissue) allows the evaluation of the role of cell-based techniques to augment healing. Furthermore, the development of advanced scaffold materials and associated techniques has contributed to creating an intracapsular biological environment for improved meniscus healing. Notably, Jakobi and

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Published: 2012.07.31

All-arthroscopic technique of biological meniscal tear therapy with collagen matrix

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⁴ 1787 Môtier, Route du lac 161, Switzerland

Summary

Purpose: The number of meniscus surgeries, including partial or complete meniscectomy, has increased considerably with the progress in knee arthroscopy. An analysis of treatment results, carried out at several centres by numerous study groups, showed a development of early degenerative changes in the knees of treated patients.

Methods: This study is aimed at developing a fully arthroscopic technique to treat meniscal tears by suturing and wrapping them in collagen matrix, followed by injection of liquid bone-marrow collected from the tibial proximal epiphysis, into the area of meniscal lesion.

Results: In this paper, we presented arthroscopic technique for wrapping meniscal tears using the collagen matrix sutured with the Fast-Fix sutures.

Conclusions: Proposed surgical technique is not straightforward to perform, but can be learned by adhering to strict arthroscopic principles. The use of collagen matrix and bone marrow aspirate from bone-marrow blood, including stem cells, creates favourable biological conditions for meniscus healing, which may increase the rate of healing.

Level of evidences: V

Key words: meniscal tear • meniscal repair • collagen matrix • marrow blood • stem cells

Full-text PDF: <http://www.polorthoptraumatol.com/fulltxt.php?ICID=883275>

Word count: 2182

Tables: 8

Figures: 1

References: 14

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e-mail: tomasz.piontek@rehasport.pl

BACKGROUND

The number of meniscus surgeries, including partial or complete meniscectomy, has increased considerably with the progress in knee arthroscopy. An analysis of treatment results, carried out at several centres by numerous study groups, showed a development of early degenerative changes in the knees of treated patients [1,2]. This information indicates the enormous role that the meniscus plays in the normal functioning of the knee and, therefore, should persuade orthopaedic surgeons to make all possible attempts to treat meniscal tears in a way that preserves the meniscus in the knee [1,3–6]. Very good results are achieved after suturing meniscal tears in well-vascularised layers (red) and in longitudinal or transverse lesions (simple tears) [2]. The results of the treatment of meniscal tears of the combined type in less-vascularised layers are not as promising [4,7,8]. Webber et al. showed that meniscal fibrochondrocytes multiply better and reconstruct the extracellular matrix more actively if they are medium rich in chemotactic and mitogenic factors such as blood thrombi [9]. Arnoczky et al. confirmed this hypothesis in their studies in biological models (dogs), showing an increase in the rate of healing of simple meniscal tears in the white layer (not vascularised) after serum thrombus administration into the site of the lesion [10]. However, complete healing of meniscal tears of the combined type is still difficult to achieve, even after the administration of the chemotactic and mitogenic factors present in serum thrombi [11]. In order to increase the rate of complete healing of meniscal tears of the combined type in less-vascularised layers, Henning et al. proposed a surgical technique involving meniscus-suturing and wrapping the meniscus in a fragment of the patient's own fascia, followed by administration of serum thrombi at the site of the lesion. In their group of patients, such a procedure allowed for an increase in the rate of complete healing, from 75% to 92% [11]. Despite such promising results, the procedure proposed by the aforementioned authors did not find wider application, probably because of serious technical difficulties in performing such a surgery. Barrett et al. attempted to improve this surgical technique and presented their own method of wrapping the meniscus in a fragment of fascia under arthroscopic control and with the use of T-Fix meniscal sutures (Smith & Nephew) [12]. However, the surgery proposed by these authors is still technically challenging and has not found wider application. Partial or complete meniscectomy is still the most frequently employed treatment for meniscal tears of the combined type.

The technique of meniscus-wrapping proposed by these authors is associated with additional tissue traumatization following graft collection (fragmentation of the fascia). The results analysis of soft-tissue defects treatments with using porcine collagen matrix indicates an excellent integration into the surrounding soft tissues and membrane rebuilding into tissues that are similar in structure to the surrounding connective tissues (fibrous tissue or cartilage) [4]. In a study by Shea et al., comparing the ability of reconstruction and the quality of tissues for various types of matrixs, the authors showed that porcine-collagen matrix are actually the best of the commercially available collagen matrixs [4]. Author (RPJ) proposed and tested the treatment of combined meniscal tears by suturing them and wrapping them in a collagen matrix in a group of 30 patients [13].

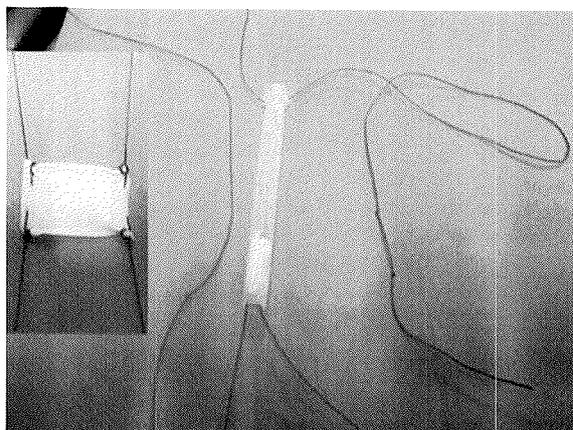


Figure 1. Suturing membrane – sutures location with marking knots and transparent tube with prepared membrane inside.

The results obtained are very promising, but the surgical technique, an inside-out suturing, presents some challenges can also be time-consuming and requires an additional surgical approach.

OBJECTIVES

This study is aimed at developing a fully arthroscopic technique to treat meniscal tears by suturing and wrapping them in Chondro-Gide® (Geistlich Pharma AG, Wollhusen, Switzerland) collagen matrix, followed by injection of liquid bone-marrow collected from the tibial proximal epiphysis, into the area of meniscal lesion.

SURGICAL TECHNIQUE

A diagnostic knee arthroscopy is made to rule out other pathology, such as lesions of ligaments and cartilage. All cartilage lesions are repaired during surgery. For meniscus suturing and wrapping with the collagen membrane, the authors include the types of meniscal tears that so far have been treated with partial meniscectomy. These are tears of the combined type, i.e., horizontal and radial types, involving the white and red-white vascularisation layers, as well as extensive tears of bucket-handle type.

Collagen-matrix preparation

While the surgeon is evaluating the knee joint, his assistant prepares the collagen matrix in the following way: The matrix, usually the size 30/20 mm, is trimmed by Vicryl 1 suture, passing through the surface of the matrix on either side. Such a technique assures that pulling forces exerted on the matrix while placing it onto meniscus, are transferred by the threads and to by the matrix itself. The matrix is then inserted in the applicator (a transparent tube, diameter 10 mm, with two holes on the one end). The way of folding the matrix and the arrangement inside the tube are described in Figure 1.

Meniscus wrapping (in the collagen matrix)

Placing suture shuttle

Using direct arthroscopic vision the loops of threads running through the meniscal posterior horn (Figure 2A) and

13 Pirmo dalis

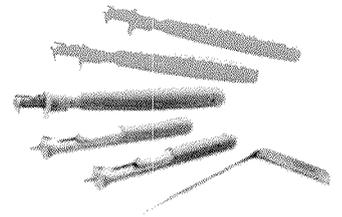
Meniscal Repair Systems
FAST-FIX® (all-inside)

13.

FAST-FIX 360

The FAST-FIX 360 meniscal repair system offers exceptional fixation strength, easier implant deployment, smaller insertion points that minimize disruption to the meniscus, a built in depth penetration limiter and a stiffer needle shaft for enhanced control. All this to help optimize the meniscus repair.

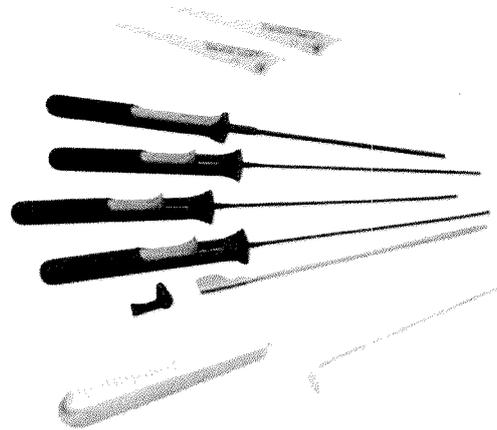
Reference #	Description
72202467	FAST-FIX 360 straight
72202468	FAST-FIX 360 curved
72202469	FAST-FIX 360 reverse curved
72202674	FAST-FIX 360 Straight Knot Pusher/Cutter and Slotted Cannula sets
72202675	FAST-FIX 360 Curved Knot Pusher/Cutter and Slotted Cannula sets



ULTRA FAST-FIX

13.

Reference #	Description
72201490	ULTRA FAST-FIX, straight
72201493	ULTRA FAST-FIX, AB, straight
72201491	ULTRA FAST-FIX, curved
72201494	ULTRA FAST-FIX AB, curved
72201492	ULTRA FAST-FIX, reverse curved
72201495	ULTRA FAST-FIX AB, reverse curved
72201537	Knot Pusher/Suture Cutter, straight



Probe, Rasp and Accessories

015186	Meniscal Depth Probe
014549	45° Diamond Rasp
014550	90° Diamond Rasp
011703	Sterilization Tray, 9.25" W x 3" L x 1.5" H
7210977	Slotted Cannula
7209950	Suture Threaders, sterile (10 per box)
7210450	Suture Funnel, sterile (10 per box)

Kopija nėra

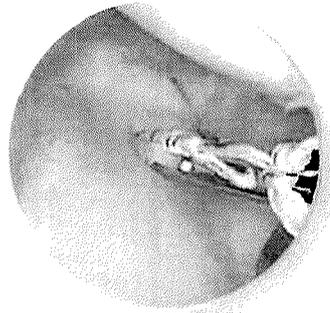
Vadovo asistentė
Neringa Veličkienė

2016-06-10

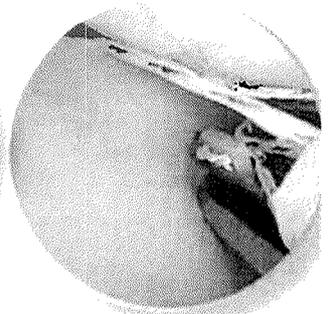


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13.



1 Deploy preloaded implant 1



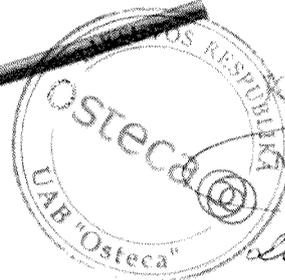
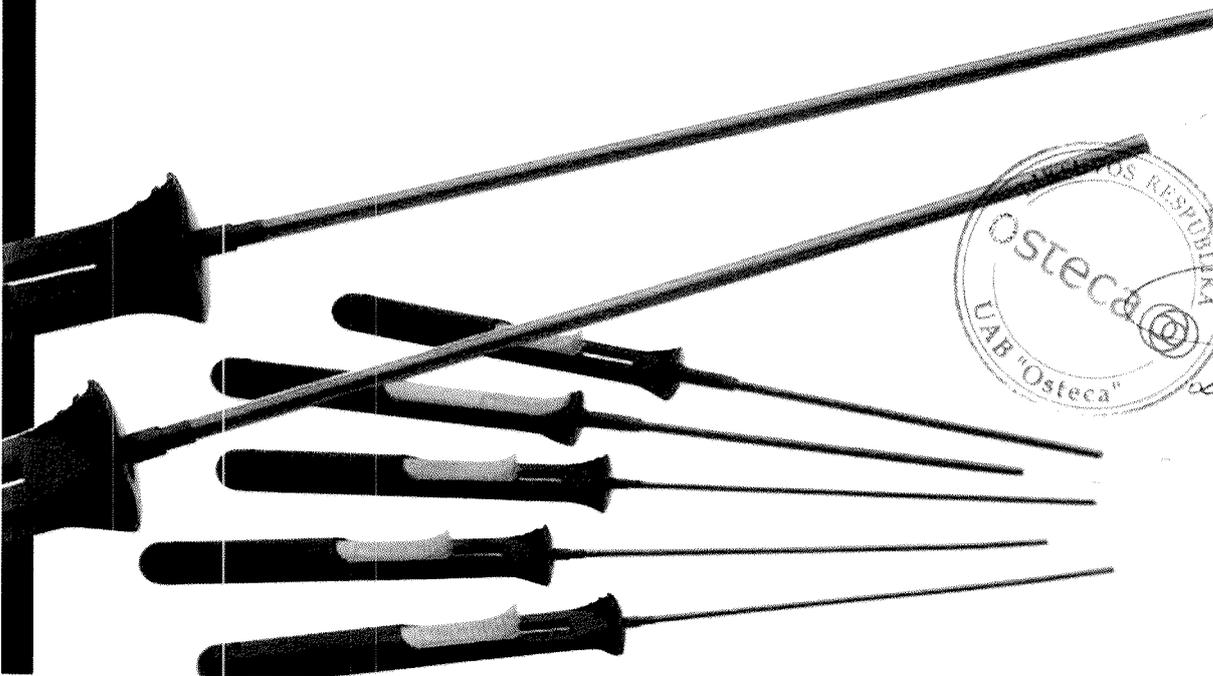
2 Deploy preloaded implant 2

THE TECHNIQUE

The **ULTRA FAST-FIX[®] Meniscal Repair System** is a unique all-inside implant system, offering the fixation strength of an open-vertical mattress stitch without the invasive surgical procedure normally required for suture-based repairs.

When the original FAST-FIX[®] Meniscal Repair System was introduced in 2001, it set the benchmark for minimally-invasive, all-inside repairs. Thanks to its preloaded implants, pre-tied sliding knot, and innovative pusher/cutter device, this innovative system lets you deploy two implants vertically or horizontally on either side of the meniscus, tighten the suture and trim the excess.

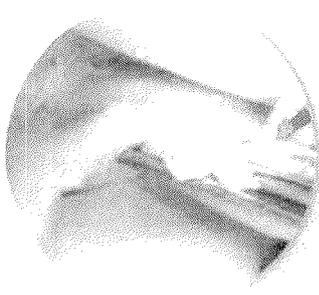
Building on its proven clinical success, the all-new ULTRA FAST-FIX system adds easier knot sliding and stronger suture. The result is a faster, more secure meniscal repair system that will help maximize the chances of a successful meniscus tear recovery.



Kopija tikrai
Vadovo asistentė
Neringa Veličkienė
2016-06-10



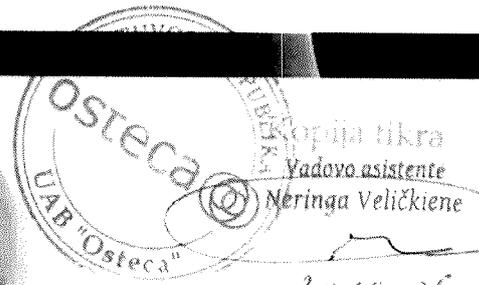
3 Slide the pre-tied knot, tighten the suture, and trim the excess.



4 Use the reverse-curved needle to repair tears on the inferior surface (tibial side).



5 Curved and reverse-curved needles are designed to repair tears on the tibial side.



13.

Fast and easy

Compared to conventional suture-based repair systems, the iG TAA FAST Fix system is a closed fix system with a pre-tied knot that automates the needle insertion and repair.

Strong and clinically proven

The iG TAA FAST Fix system is made with a PEEK-OPTIMA® high strength non-absorbable polymer implant that provides a strong, durable, and long-lasting repair.

Contains no hard device heads

Learn more at www.ostecca.com

Easy knot sliding with ULTRABRAID® suture

Offers advantages over traditional polyester suture, including higher knot-breaking strength, increased lubricity and a stronger resistance to tearing.

PEEK-OPTIMA® high strength non-absorbable, polymer implants

PEEK-OPTIMA® implant heads are designed so that the implant will resist breakage when used with high strength ULTRABRAID® suture.

PLLA absorbable implants

Bioabsorbable version of iG TAA FAST Fix.

Curved and reverse-curved needles

Curved needles promote safer and easier access to a multitude of tear sites. The reverse-curved needle is designed for repairing tears on the inferior surface. Because the needle's point is on the opposite side of the curve, it can safely enter the inferior area without skiving the meniscus or the tibial plateau.

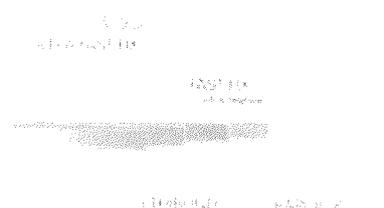
Mechanical Properties of iG TAA FAST Fix Implants and Devices

ULTIMATE STRENGTH N



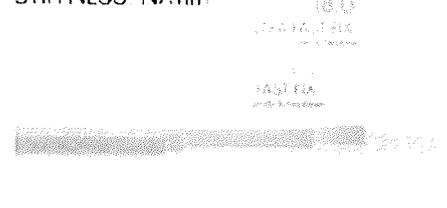
Both iG TAA FAST Fix implants achieved the same ultimate strength values. As a result, they are equally strong.

ELONGATION



At the same level of the mechanical properties of the iG TAA FAST Fix iG TAA FAST Fix system showed a significant increase in ultimate strength and stiffness, and a decrease in elongation compared to iG TAA FAST Fix (PEEK-OPTIMA) and the conventional suture processing system.

STIFFNESS N/mm



Compared to iG TAA FAST Fix (PEEK-OPTIMA) system, the iG TAA FAST Fix (PLLA) system showed a significant increase in ultimate strength and stiffness, and a decrease in elongation compared to iG TAA FAST Fix (PEEK-OPTIMA) and the conventional suture processing system.

ULTRA FAST – FIX

Menisko siuvimo sistema

Ultra Fast - Fix yra unikali menisko siuvimo sistema, garantuojanti stiprią fiksaciją be invazinių chirurginių procedūrų, kurios yra būtinos kitoms įprastoms menisko siuvimo sistemoms.

Originali menisko siuvimo sistema Ultra Fast-Fix buvo pristatyta 2001 m. ir pakėlė minimalios invazijos menisko siuvimo technologijas į aukštesnį lygį. Iki galo paruoštų implantų, užrišimui paruošto slenkančio mazgo ir inovatyvaus stūmimo – kirpimo prietaiso dėka ši naujoviška sistema leidžia vertikaliai arba horizontaliai paskirstyti implantus iš abiejų menisko pusių, užveržti mazgą ir nukirpti likusį siūlą.

Naujoji Ultra Fast-Fix sistema pasižymi stipresniu siūlu ir slenkančio mazgo mechanizmu. Tai užtikrina siuvimo sistemos greitumą bei saugumą.

Vienintelis tokio pobūdžio produktas

Greita ir paprasta procedūra

Skirtingai nei tradicinės menisko siuvimo sistemos, Ultra Fast-Fix yra implantų sistema su iš anksto paruoštu, savaime slenkančiu mazgu. Dėl šios priežasties nebereikia intraartikuliarinio mazgo rišimo procedūros.

Stipri ir kliniškai įrodyta sistema

Užtikrina stiprų ir patikimą menisko susiuvimą.

Minimali invazija

Mažina sąnarių kremzlių traumos riziką.

Slankiojantis mazgas su ULTRABRAID siūlais

Nuo tradicinių poliesterio siūlų šie skiriasi tuo, kad yra daug stipresni ir atsparesni susidėvimui; stipriai užsiveržia mazgas.

PEEK – OPTIMA® - itin stiprūs nesirezorbuojantys polimeriniai implantai

PEEK OPTIMA polimerai užtikrina, kad implantas nesulūš procedūros metu.

PLLA absorbuojantys implantai

Tai absorbuojanti Ultra Fast-Fix implantų versija.

Lenktos ir atvirkščiai lenktos adatos

Adatos yra lenktos dėl saugesnio ir lengvesnio priėjimo prie plyšio vietos. Atvirkščiai lenktos adatos yra skirtos susiūti apatinio paviršiaus plyšį. Kadangi adatos galas yra priešingoje linkio pusėje, ji gali saugiai pasiekti apatinį paviršių be menisko įjaustymo.

Kiekviena UTRA FAST-FIX sistema sudaryta iš dviejų integruotų 5 mm polimerinių inkarų su #2 neabsorbuojamu UHMW polietileno ULTRABRAID siūlu kuris turi anksto paruoštą slystantį mazgą. Visa ši sistema yra integruota į lengvai įvedamą adatą

13.

Menisko siuvimo sistemos**FAST-FIX**

FAST-FIX menisko siuvimo sistemos išskirtinumas:

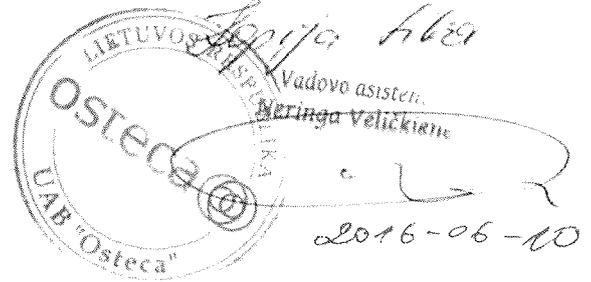
- fiksacija yra ypatingai stipri ir paprasta
- implanto dislokacija
- mažesni įvedimo taškai, kurie sumažina menisko pažeidimus
- įsiskverbimo gilumo ribotuvus
- tvirtesnė veleno adata

Visi šie bruožai padidina menisko siuvimo procedūros sėkmingumą.

Ref	Parametrai
72202467	FAST-FIX 360 tiesus
72202468	FAST-FIX 360 lenktas
72202469	FAST-FIX 360 atvirkščiai lenktas
72202470	FAST-FIX 360 AB, tiesus
72202471	FAST-FIX 360 AB, lenktas
72202472	FAST-FIX 360 AB, atvirkščiai lenktas
72202474	FAST-FIX 360 tiesus mazgo nustūmėjas/nukirpėjas ir pailgų kaniulių rinkinys
72202475	FAST-FIX 360 lenktas mazgo nustūmėjas/nukirpėjas ir pailgų kaniulių rinkinys

Ref	Parametrai
72201491	ULTRA FAST-FIX, lenktas
72201492	ULTRA FAST-FIX, atvirkščiai lenktas
72201494	ULTRA FAST-FIX AB, lenktas
72201495	ULTRA FAST-FIX AB, atvirkščiai lenktas
72201490	ULTRA FAST-FIX, tiesus
72201493	ULTRA FAST-FIX, AB, tiesus
72201537	mazgo nustūmėjas/nukirpėjas, tiesus

Priedai	
015186	Menisko gylio matuoklis
014549	45 ⁰ deimantinė dildė
014550	90 ⁰ deimantinė dildė
011703	Sterilizavimo dėklas, 9.25" x 3" x 1.5"
7210977	Kaniulė
7209950	Siūlo pravedėjai, sterilūs, dėžutė 10 vnt.
7210450	siūlo nukreipėjai, sterilūs, dėžutė 10 vnt.



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MA Pirello dall

Ordering Information

Q-FIX® All-Suture Implants

Reference # Description

1.8mm suture implants

25-1800	1.8MM Q-FIX ALL-SUTURE ANCHOR
25-2800	2.8MM Q-FIX ALL-SUTURE ANCHOR
25-1810	DISPOSABLE KIT FOR 1.8MM Q-FIX IMPLANT, INCLUDES DRILL, DRILL GUIDE AND OBTURATOR
25-1811	DISPOSABLE KIT, HIP, FOR 1.8MM Q-FIX IMPLANT, INCLUDES DRILL, DRILL GUIDE AND OBTURATOR
25-2810	DISPOSABLE KIT FOR 2.8MM Q-FIX IMPLANT, INCLUDES DRILL, DRILL GUIDE AND OBTURATOR
25-2820	REUSABLE BONE PUNCH FOR 2.8MM Q-FIX IMPLANT
25-1812	REUSABLE 1.8MM PATHFINDER® OBTURATOR
25-2812	REUSABLE 2.8MM PATHFINDER OBTURATOR

ArthroCare Corporation
7000 West William Cannon Drive
Austin, TX 78735
USA

www.smith-nephew.com

Order Entry: 1-800-343-5717
Order Entry Fax: 1-888-994-2782

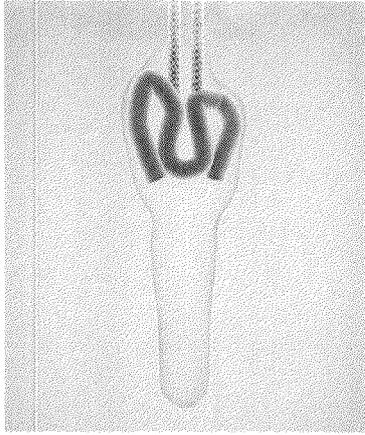
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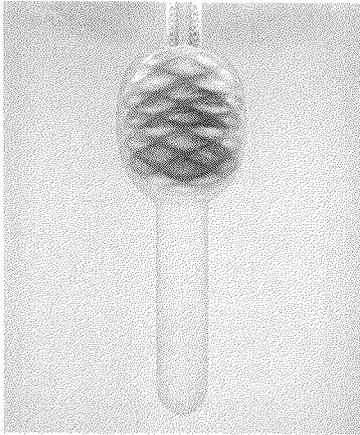
Hi piratimo dadas

Q-FIX[®] all-suture implants

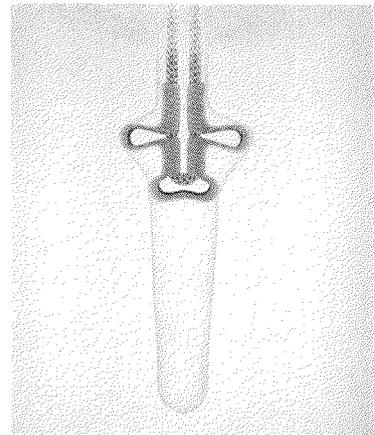
The Q-FIX family of implants is the next generation in all suture implant technology, providing the benefits of an all suture implant with performance characteristics equivalent or better than traditional anchor designs.¹



Biomet Juggernaut

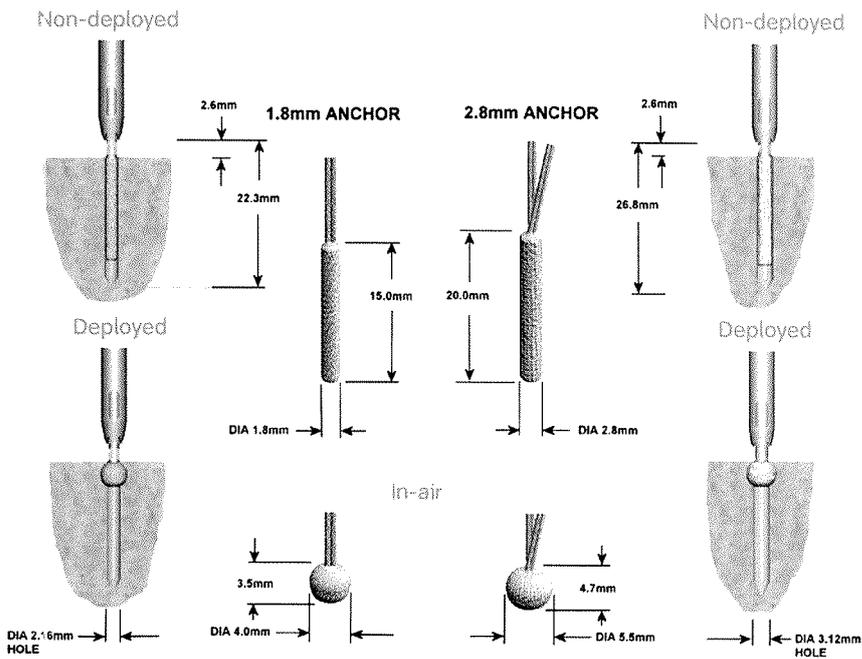


sketch Smith & Nephew Q-FIX*



Stryker Iconix

Specifications of the 1.8 and 2.8mm implants



Ancillaries



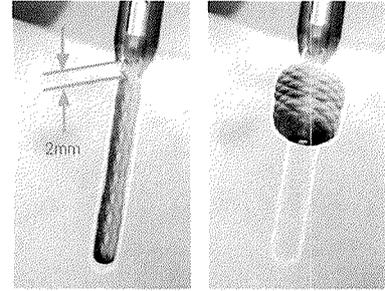
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MA pendimo dalis

*su rimbartintu metelinu
izvedileu*

Consistent deployment

Q-FIX® provides consistent deployment due to the radially expanding implant design and delivery system that acts like a knot pusher.



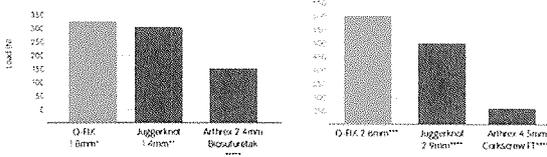
Insertor is 2mm below bone surface

Radial expanding deployment

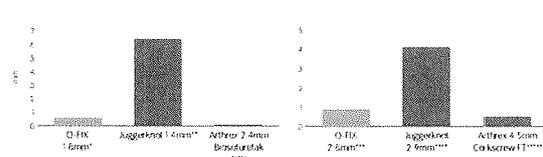
Superior fixation¹

The Q-FIX delivery system with automated suture pull to a target of 140 newtons ensures full deployment of the implant within the bone hole, giving the surgeon reproducible bone fixation performance they can count on.

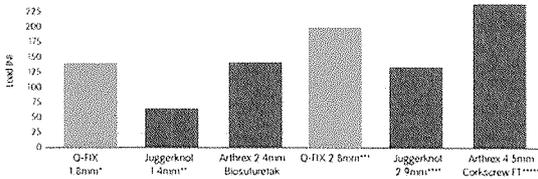
Load (N) to Failure



Anchor Displacement



Load (N) @ 2mm Displacement

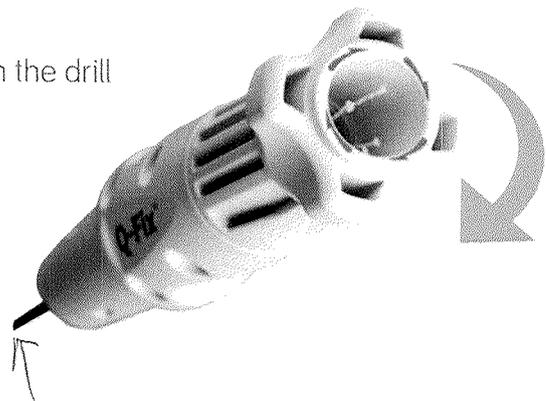


References

- ¹ P/N 54231-01 Rev. A, P/N 49193-01 Rev. A, P/N 51963-01 Rev. A
 - ^{*} Reference P/N 49193-01 Rev. A
 - ^{**} Reference P/N 51800
 - ^{***} Reference P/N 51963-01 Rev. A
 - ^{****} Reference P/N 51801
 - ^{*****} Reference P/N 54231-01 Rev. A
- Tested in 20pcf foam with synthetic cortical shell, including ultimate tensile strength Q-FIX N=10, Juggerknot N=2, 4.5mm Corkscrew FT N=3

Streamlined technique

Implant deployment with a turn of the dial through the drill guide streamlines implant placement.



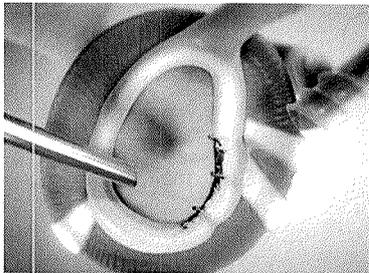
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Q-FIX[®] Applications

14 Pirilimo balls

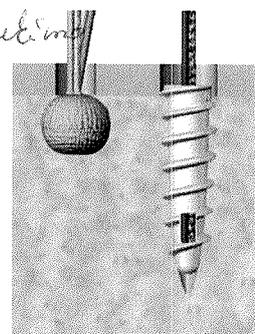
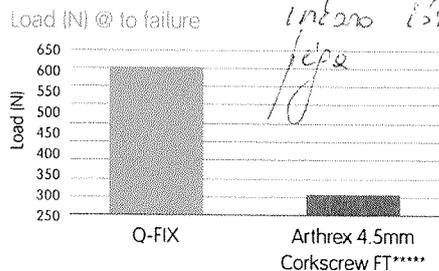
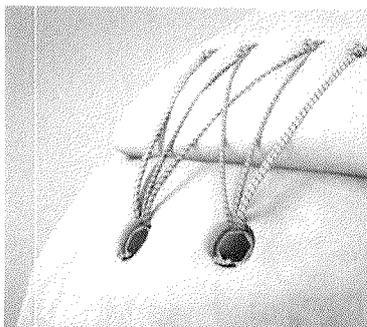
SLAP/Bankart repair

The 1.8mm Q-FIX[®] implant and disposable kit is a great option for SLAP and Bankart repairs with implant performance superior to commonly used all-suture anchors and traditional anchors. The small implant that marries with the drill guide ensures accurate implant delivery with limited bone removal.



Rotator cuff repair

The 2.8mm Q-FIX implant's fixation performance and small footprint makes it a great option for rotator cuff repair. With performance similar to traditional corkscrew anchors more than twice the size, the 2.8mm Q-FIX is ideal for medial row fixation where performance is needed and space is limited.



Q-FIX 2.8mm versus Arthrex 4.5mm Corkscrew FT

14

You told us you wanted a more confident deployment method for all-suture-based anchors.

HEAR

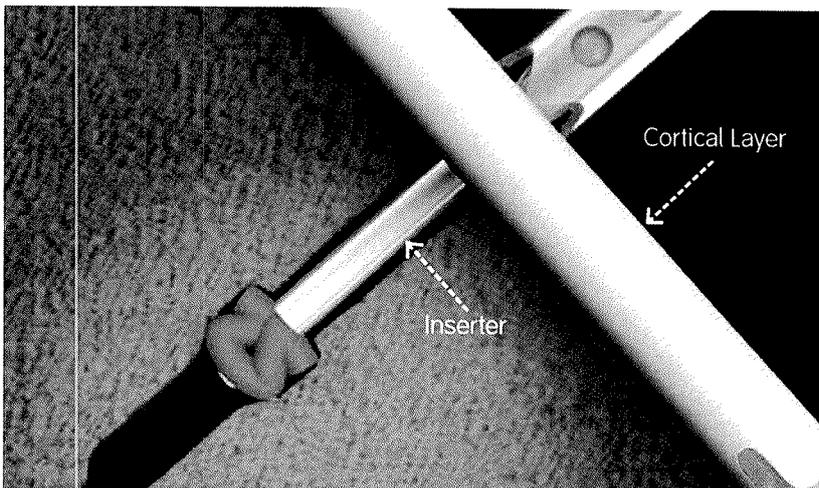
And we responded, with the SUTUREFIX ULTRA Suture Anchor. It's different because the anchor construct forms against the steel inserter, not the cortical layer like other soft anchors. It even lets you know when the anchor has been deployed – with an audible “click,” as well as tactile and visual cues.

FEEL

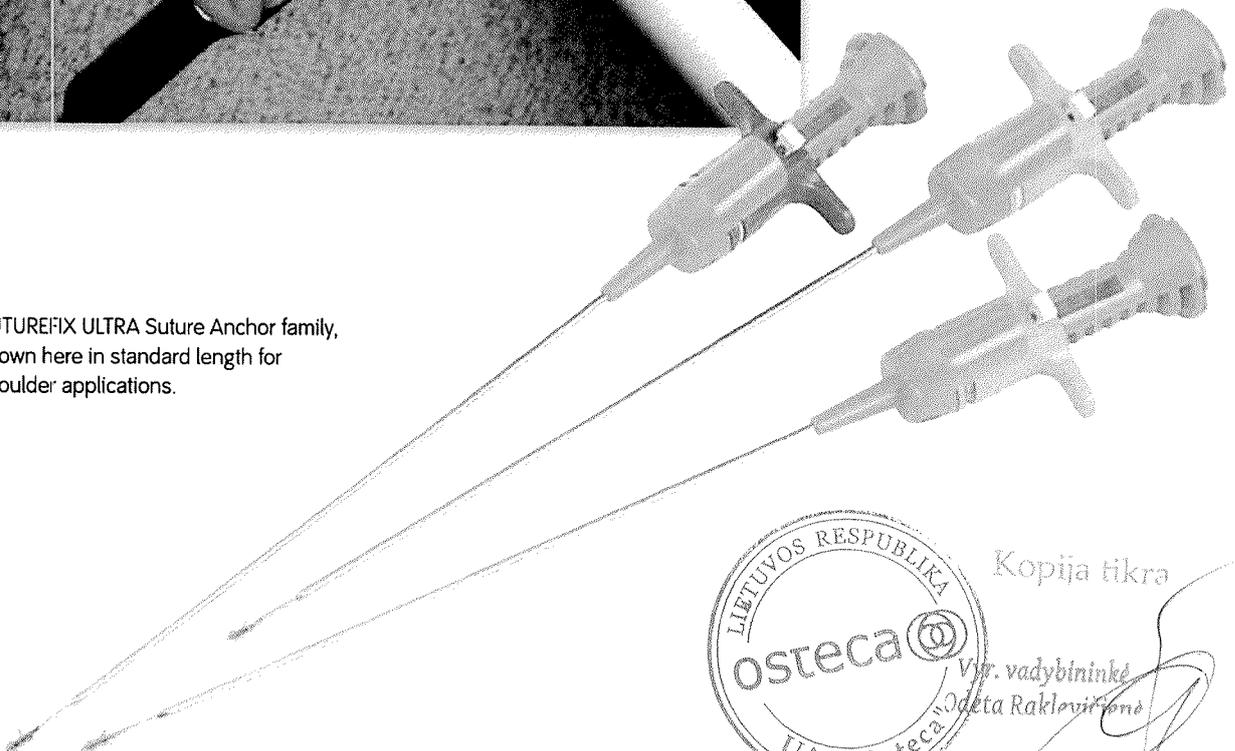
SEE

A strong, reliable construct

As the SUTUREFIX ULTRA Suture Anchor deploys, it forms a ball of suture against the inserter tube – not the cortical layer as with competitive soft anchors. So deployment is less dependent upon bone density,¹ and therefore more consistent.



SUTUREFIX ULTRA Suture Anchor family, shown here in standard length for shoulder applications.



Kopija tikra

Vyr. vadybininkė
Džeta Raklovitė

At Pirmo dalis

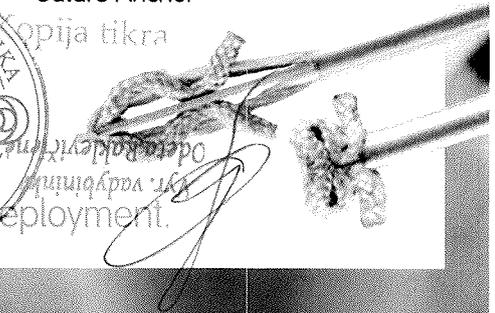


*Intorinis svūlas, vūlientis
išuplēcienēo mazoo principu*

The only soft anchor that tells
you when it's deployed.

Sensory feedback takes the guesswork out of soft anchor deployment.

 **smith&nephew**
SUTUREFIX ULTRA
Suture Anchor



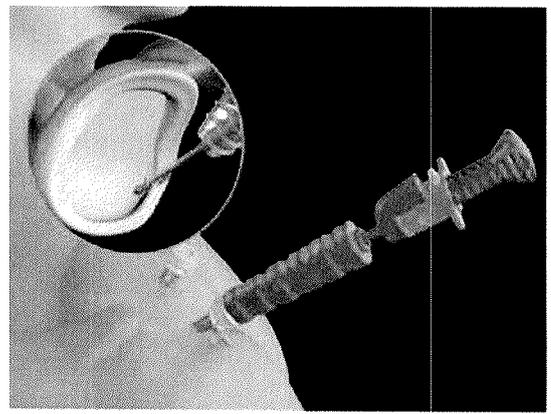
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14.

įkalamas ir ultrabūsenos

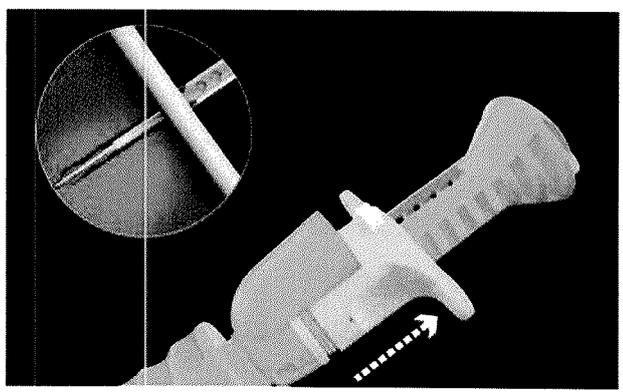
You can HEAR it. FEEL it. SEE it.

Competitive all-suture anchors require you to pull on the suture strands to deploy their anchors, and do not offer distinct feedback as to when or if successful anchor deployment has taken place. The SUTUREFIX ULTRA Suture Anchor makes deployment more certain – with cues you can hear, feel and see.²



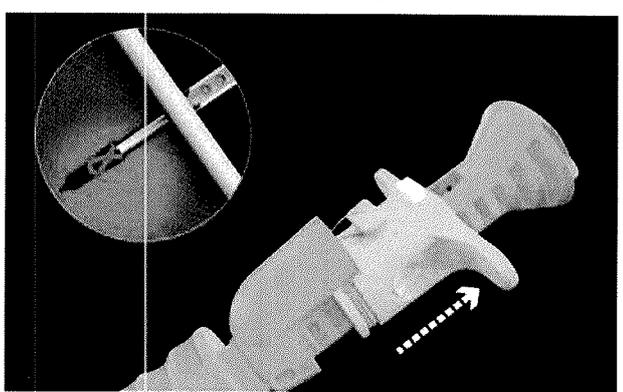
Your go-to anchor when space is limited

Designed for instability repair, the SUTUREFIX ULTRA Suture Anchor offers a strong, space-saving alternative to traditional hard anchors, whose larger size limits the number of anchors you can safely place within the glenoid rim. Available single-loaded (1.7 mm) or double-loaded (1.9 mm), the SUTUREFIX ULTRA Suture Anchor has a small diameter and shallow insertion depth, which let you comfortably place multiple implants to create a large, evenly distributed surface area of tissue compression, providing greater tissue-to-bone contact³ for a secure repair.



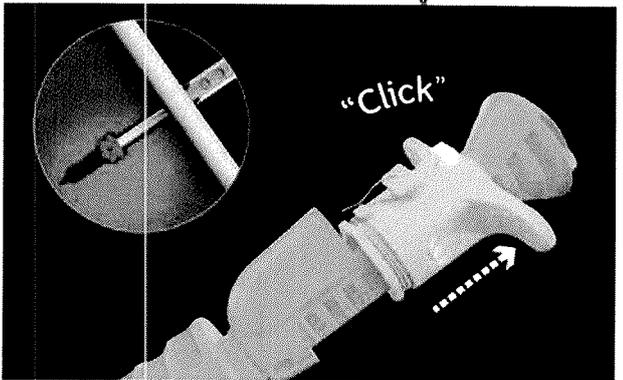
Once the anchor has been tapped into the pilot hole, deployment is achieved by pulling back the trigger.

įkalamas

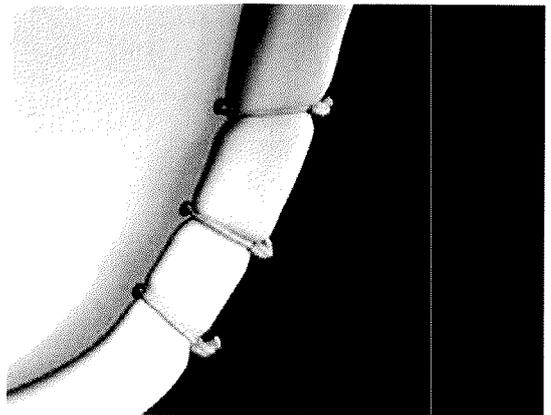


As the anchor deploys, it expands laterally in the drill hole, forming a ball.

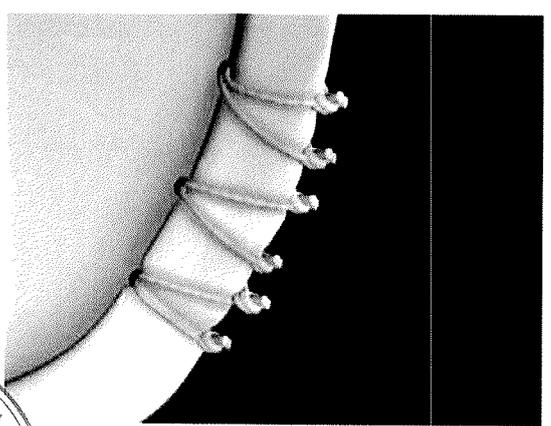
ultrabūsenos



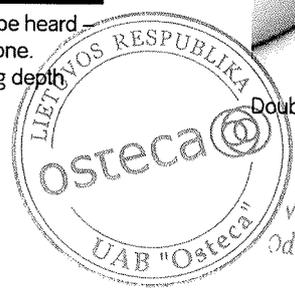
Once the trigger is pulled all the way back, a "click" can be heard – and felt – confirming deployment into the cancellous bone. Drill guide windows provide visual confirmation of drilling depth and anchor placement.



Single-loaded 1.7 mm anchor



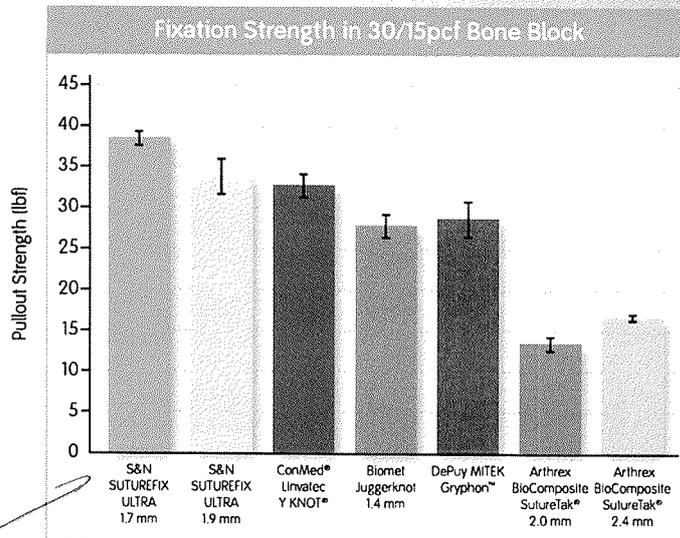
Double-loaded 1.9 mm anchor



Kopija tikra
vyr. vadybininkė
Odetė Raklevičienė

Superior fixation strength compared to competing soft and hard anchors⁴

The SUTUREFIX ULTRA Suture Anchor achieves ample pullout strength with a small amount of material. And it produces a secure repair, designed to hold fixation throughout the healing process, withstanding typical shoulder loading forces and supporting the range of motion necessary for physical therapy.



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Data on file: 15002113.

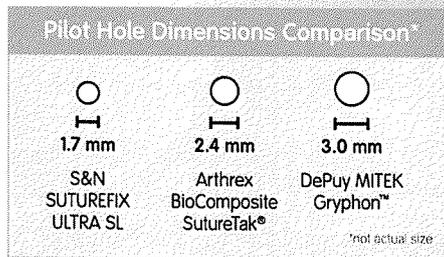
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pega

Increased bone conservation through smaller bone voids⁵

Because of its small size, SUTUREFIX ULTRA Suture Anchor requires a smaller pilot hole than larger, hard anchors, resulting in less bone removal and greater bone conservation.

In addition, the short, small-diameter tunnels reduce the likelihood of colliding with other

anchors, or fracturing the bone by having too many anchors crowded into a tiny space.⁶



1. Data on file: 15002112.
2. Data on file: 15002117.
3. Data on file: 15002117.
4. Data on file: 15002059.
5. Data on file: 15002113.
6. Data on file: 15002059.



vyr. vadybininkė
Odetė Raklevičienė

An innovative foundation for fixation – plus everything you already like about soft anchors.

- The SUTUREFIX ULTRA Suture Anchor for shoulder repair minimizes displacement after cyclic loading, maintaining contact between the labral tissue and the glenoid rim.¹
- Anchor construct is made from high-strength polyester suture, preloaded with ULTRABRAID[®] Suture (see Ordering Information for specifications).
- Soft, flexible material simplifies revision.
- For hip repair, this small, soft anchor allows fine tuning of the labral seal by placing additional anchors where traditional, larger anchors won't fit.²

14



Vyr. vadybininkė
Odetė Raklovičiūtė

1. Data on file: 15002113.
2. Data on file: 15002059.

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Ordering Information

SUTUREFIX ULTRA Soft Anchors and Instrumentation Systems for Shoulder

Reference #	Description
Anchors	
72203852	SUTUREFIX ULTRA Anchor 1.7 mm S with one Solid Blue (#2) ULTRABRAID® Suture
72203853	SUTUREFIX ULTRA Anchor 1.7 mm S with one Blue COBRAID (#2) ULTRABRAID Suture
72203854	SUTUREFIX ULTRA Anchor 1.9 mm S with two Blue, Blue COBRAID (#1) ULTRABRAID Sutures
Drills	
72203855	Twist drill 1.7 mm S
72203856	Twist drill 1.9 mm S
Guides & Obturators	
72203857	Drill Guide crown tip, Reusable, S
72203858	Drill Guide Spike tip, Reusable, S
72203859	Drill Guide Fishmouth tip, Reusable, S
72203861	Obturator, Blunt tip, Reusable, S
72203862	Obturator, Cannulated, Reusable, S
72203863	Obturator, Trocar tip, Reusable, S

Anchor Packs

72203953	SUTUREFIX Ultra Anchor S, Box of 3 with one Drill 1.7 mm, Disposable
72203954	SUTUREFIX Ultra Anchor S, Box of 3 with one Drill 1.9 mm, Disposable
72203955	SUTUREFIX Ultra Anchor 1.7 mm S, Box of five
72203956	SUTUREFIX Ultra Anchor 1.9 mm S, Box of five

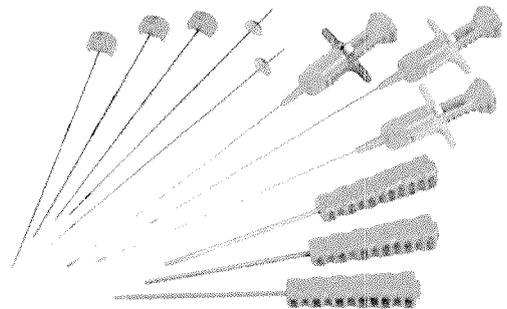
Instrumentation Kits

72203957	Drill guide, Crown tip, Disposable; Obturator, Blunt, Disposable; 1.7 mm Drill, disposable
72203958	Drill guide, Fishmouth tip, Disposable; Obturator, Blunt, Disposable; 1.7 mm Drill, disposable
72203959	Drill guide, Spiked tip, Disposable; Obturator, Blunt, Disposable; 1.7 mm Drill, disposable
72203960	Drill guide, Crown tip, Disposable; Obturator, Blunt, Disposable; 1.9 mm Drill, disposable
72203961	Drill guide, Fishmouth tip, Disposable; Obturator, Blunt, Disposable; 1.9 mm Drill, disposable
72203962	Drill guide, Spiked tip, Disposable; Obturator, Blunt, Disposable; 1.9 mm Drill, disposable

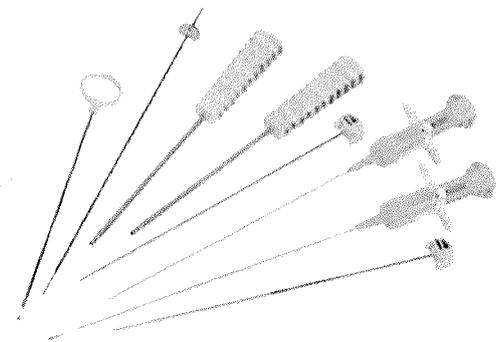
SUTUREFIX ULTRA Soft Anchors and Instrumentation Systems for Hip

Reference #	Description
Anchors	
72203841	SUTUREFIX Ultra Anchor 1.7 mm XL with one (#2) ULTRABRAID suture (blue)
72203842	SUTUREFIX Ultra Anchor 1.7 mm XL with one (#2) ULTRABRAID suture (blue-COBRAID)
Drills	
72204669	SUTUREFIX Ultra Drill 1.7mm XL, Disposable
Guides & Obturators	
72203844	Drill Guide XL, Crown Tip
72203845	Drill Guide XL, Spike Tip
72203846	Obturator XL, Blunt tip
72203899	Obturator XL, Cannulated, Blunt Tip
Knot Pusher	
72203850	ELITE® Knot Pusher XL

SUTUREFIX ULTRA Soft Anchors and Instrumentation Systems for Shoulder



SUTUREFIX ULTRA Soft Anchors and Instrumentation Systems for Hip



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