

Post-Operative Instructions

Open Osteochondral Allograft Procedure for Femur

Day of surgery

- A. Diet as tolerated
- B. Icing is important for the first 5-7 days post-op. While the post-op dressing is in place, icing should be done continuously. Once the dressing is removed on the third post-operative day, ice is applied for 20-minute periods 3-4 times per day. Care must be taken with icing to avoid frostbite. Alternatively, Cryocuff or Game-ready ice cuff can be used as per instructions.
- C. Pain medication as needed every 4 hours (refer to pain medication sheet).
- D. Make sure you have a physical therapy post-op appointment scheduled during the first week after surgery.

Video instructions for your brace can be found at <https://www.youtube.com/watch?v=jyRZkSyFBOQ>

First Post-Operative Day

- A. Continue ice pack every 1-2 hours while awake or at least twenty minutes prior to and after exercise session.
- B. Pain medication as needed.

Second Post-Operative Day Until Return Visit

- A. Continue ice pack as needed.
- B. Unless otherwise noted, weight-bearing is toe-touching only for the first 4 weeks after surgery. After 4 weeks, you can bear as much weight on the affected leg as you can tolerate. Most patients use crutches for the first 2-3 weeks.
- C. Call our office @ 646-501-7223 option 4, option 2 to confirm your first postoperative visit, which is usually about 1-2 weeks after surgery if you have not been given a time. If you are experiencing any problems, please call our office or contact us via the internet at www.newyorkortho.com.

Third Post-Operative Day

- A. You may remove surgical bandage and shower this evening. Apply 4x4 (or similar size) waterproof bandage to these wounds prior to showering and when showering is complete apply fresh waterproof bandage. Please ensure that the bandage is large enough to completely cover the incision. You will need to follow this routine for 2 weeks after surgery.



MADE FOR NEW YORK.

Dr. Laith M. Jazrawi

Chief, Division of Sports Medicine
Associate Professor Department of Orthopaedic Surgery

Rehabilitation Protocol Following Osteochondral Allograft or Autograft Transplantation (OATS)

There are two types of cartilage in the knee—meniscus and articular cartilage. There are two menisci in the knee—a medial meniscus and a lateral meniscus. These menisci are semi-lunar wedges that sit between the femur (thigh bone) and tibia (shin bone). The menisci are primarily composed of fibrocartilage, with about 75% of the dry weight being Type I collagen. The function of the menisci is to protect the other type of cartilage in the knee—the articular cartilage. The articular cartilage is a layer of hyaline cartilage that covers the end of bones that articulate with other bones. In the knee you have articular cartilage on the end of the femur (femoral condyles), the top of the tibia (tibial plateau) and the back of the knee cap (patella). The articular cartilage has a frictional coefficient approximately one fifth of ice on ice (i.e. rubbing articular cartilage on articular cartilage would be five times smoother than rubbing ice on ice.) This allows for a very smooth gliding surface. A large portion of articular cartilage is fluid, which provides significant resistance to compressive forces.¹

During athletic trauma or injury, focal areas of the articular cartilage can be damaged or torn, exposing the subchondral bone. This is referred to as an articular cartilage lesion (Figure 1). When this happens you lose the normal smooth gliding articulation and the ability to resist compressive forces at the joint. These changes can cause pain, swelling, loss of motion, weakness and reduced function or performance.

The osteochondral autograft transplantation (OATS) procedure involves transplantation of plugs of bone with overlying articular cartilage (Figure 3) from areas of relatively no weight bearing (Figure 2) to weight bearing areas of the knee which have articular cartilage loss.² An allograft (cadaver) plug is also an option that can be used to fill the lesion. The size of the harvested plug is sized to match that of the injury/lesion. These plugs are then pressed into holes created at the lesion. This can be done with a single large plug (Figure 4) or several smaller plugs (Figure 5). Initially these plugs can be susceptible to getting pushed in further, thus weight bearing is restricted for the rest six weeks to ensure that the cartilage plug heals “flush” with the rest of the cartilage surface.²

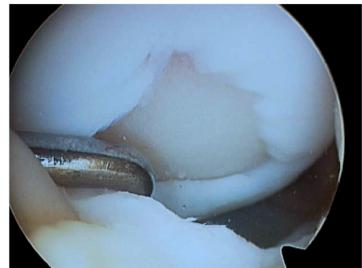


Figure 1 Full thickness articular cartilage lesion on the femoral condyle of the knee, exposing the subchondral bone plate

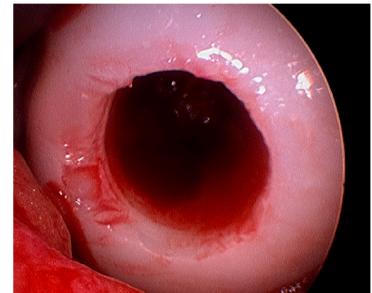


Figure 2 Donor site from area of relatively no weight bearing



Figure 3 A harvest bone plug with overlying articular cartilage (removed from donor site, Figure 2)

Rehabilitation Protocol After OATS

The OATS procedure is currently the only procedure that restores the normal hyaline articular cartilage to the injured knee. Microfracture and chondroplasty procedures attempt to fill in the chondral defects with fibrocartilage. Research has shown that fibrocartilage is more likely to deteriorate over time, and that the chance of returning to sports is greater with the OATS procedure. A study by Gudas et al³ found that 93% of patients who had an OATS procedure were able to return to their pre-injury level of sports versus 52% who underwent microfracture. The ability to return to sport is also dependent on the size of the lesion (or degree of injury), patient age, patient size (BMI), associated injuries and length of time that the injury has been present. For some patients the goal will be to return to daily activities without pain, for others it may be returning to sports.

Initially post-operative rehabilitation will focus on regaining range of motion and protecting the healing plugs. As the rehabilitation progresses the focus shifts to regaining strength and movement control. Developing the muscular ability to reduce force will help decrease stress to the articular surfaces. In the final phase of rehabilitation the athlete will work on regaining movement control with change of direction activities, such as cutting and pivoting. This is imperative to prevent increase shear stresses on the articular cartilage.

The rehabilitation guidelines are presented below in a criterion based progression. Specific time frames, restrictions and precautions are given to protect healing tissues and the surgical repair/reconstruction. General time frames are also given for reference to the average, but individual patients will progress at different rates depending on the size and location of the chondral lesion, their age, associated injuries, pre- injury health status, and rehabilitation compliance. Specific attention must be given to impairments that caused the initial problem. For example if the patient is status post medial compartment OATS procedure and they have a varus alignment, post-operative rehabilitation should include correcting muscle imbalances or postures that create medial compartment stress.

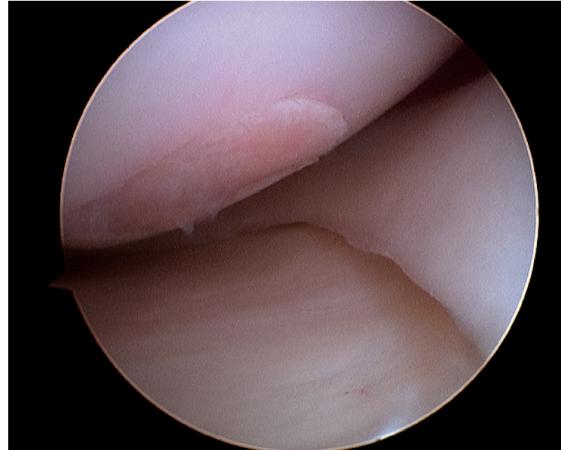


Figure 4 A large single plug press fit into a hole created at the site of the lesion

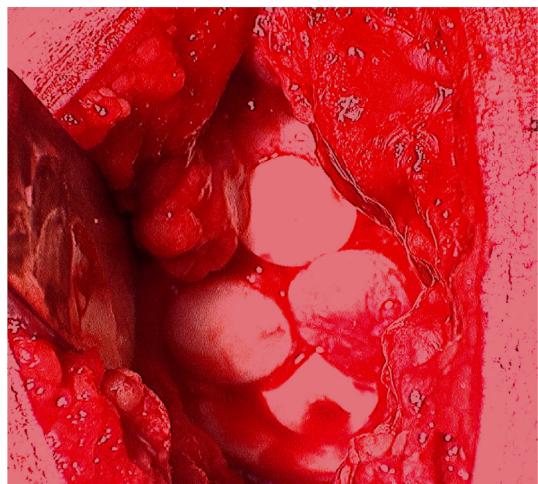


Figure 5 Several smaller plugs press fit into a hole created at the site of the lesion

Rehabilitation Protocol After OATS

Phase I (Surgery to 6 weeks after surgery)

Goals	<ul style="list-style-type: none">○ Protection of knee after surgery○ Restore normal knee ROM (range of motion) and patellar mobility○ Restore full control over leg
Bracing	<ul style="list-style-type: none">○ Week 1: Hinged knee brace locked in extension; removable for CPM & rehab○ Weeks 2-6: Gradually open brace in 20° increments as quad strengthens○ D/C brace when able to perform straight leg raise w/o extension lag
Range of Motion Exercises	<ul style="list-style-type: none">○ Continuous Passive Motion (CPM) Machine: 6-8 hours per day, 6-8 weeks○ Set CPM to 1 cycle per minute, starting at 40° flexion○ Advance 10° per day until flexion is achieved (goal: 100° by week 6)○ PROM/AAROM and stretching under guidance of PT
Therapeutic Exercises	<ul style="list-style-type: none">○ Patellar mobilization○ Quad/hamstring/adductor/gluteal sets: straight leg raise, ankle pumps○ Stationary bike for ROM

Phase II (6 to 8 weeks following surgery)

Goals	<ul style="list-style-type: none">○ Advance to full weight-bearing as tolerated○ D/C crutch use
Range of Motion Exercises	<ul style="list-style-type: none">○ Advance to full/painless ROM (should obtain 130° of flexion)
Therapeutic Exercises	<ul style="list-style-type: none">○ Closed chain exercises: wall sits, shuttle, mini-squats, toe raises○ Gait training○ Patellar mobilization○ Begin unilateral stance activities

Rehabilitation Protocol After OATS

Phase III (8 to 12 weeks following surgery)

Goals	<ul style="list-style-type: none"><input type="radio"/> Full weight-bearing
Range of Motion Exercises	<ul style="list-style-type: none"><input type="radio"/> Full/painless ROM
Therapeutic Exercises	<ul style="list-style-type: none"><input type="radio"/> Advanced closed chain strengthening exercises, proprioception activities<input type="radio"/> Sport-specific rehabilitation<input type="radio"/> Maintenance program for strength and endurance
Other Suggestions	<ul style="list-style-type: none"><input type="radio"/> Gradual return to athletic activity as tolerated<input type="radio"/> Jogging: 3 months<input type="radio"/> Higher impact activities: 4-6 months

References

1. Pearle AD, Warren RF, Rodeo SA. Basic science of articular cartilage and osteoarthritis. *Clin Sports Med.* Jan 2005;24(1):1-12.
2. Reinold MM, Wilk KE, Macrina LC, Dugas JR, Cain EL. Current concepts in the rehabilitation following articular cartilage repair procedures in the knee. *J Orthop Sports Phys Ther.* Oct 2006;36(10):774-794.
3. Gudas R, Kalesinskas RJ, Kimtys V, et al. A prospective randomized clinical study of mosaic osteochondral autologous transplantation versus microfracture for the treatment of osteochondral defects in the knee joint in young athletes. *Arthroscopy.* Sep 2005;21(9):1066-1075.

Rehabilitation Protocol: Open Osteochondral Allograft Transplantation for Femur

Name: _____

Date: _____

Diagnosis: _____

Date of Surgery: _____



Phase I (Weeks 0-6)

- **Weightbearing:** Toe Touch Weightbearing with hinged knee brace locked in extension
- **Bracing:**
 - o Hinged knee brace locked in extension (week 1) - remove for CPM and rehab with PT
 - o Weeks 2-6: Gradually open brace in 20° increments as quad control is obtained
 - o D/C brace when patient can perform straight leg raise without an extension lag
- **Range of Motion** - Continuous Passive Motion (CPM) Machine for 6-8 hours per day for 6-8 weeks
 - o Set CPM to 1 cycle per minute - starting at 40° of flexion
 - o Advance 10° per day until full flexion is achieved (should be at 100° by week 6)
 - o PROM/ AAROM and stretching under guidance of PT
- **Therapeutic Exercises**
 - o Patellar mobilization
 - o Quad/Hamstring/ Adductor /Gluteal sets - Straight leg raises/ Ankle pumps



Phase II (Weeks 6-8)

- **Weightbearing:** Weightbearing as tolerated, unlock hinged knee brace
- **Range of Motion** - Advance to full/painless ROM (patient should obtain 130° of flexion)
- **Therapeutic Exercises**
 - o Continue with Quad/Hamstring/Core strengthening
 - o Begin stationary bike for ROM



Phase III (Weeks 8-12)

- **Weightbearing:** Weightbearing as tolerated, D/C hinged knee brace
- **Range of Motion** - Full/Painless ROM
- **Therapeutic Exercises**
 - o Begin closed chain exercises - wall sits/shuttle/mini-squats/toe raises
 - o Gait training
 - o Continue with Quad/Hamstring/Core strengthening
 - o Begin unilateral stance activities



Phase IV (3-6 months)

- **Weightbearing:** Full weightbearing with a normal gait pattern
- **Therapeutic exercise**
 - o Advance closed chain strengthening exercises, proprioception activities
 - o Sport-specific rehabilitation - jogging at 4-6 months
- Return to athletic activity- 9-12 months post-op
- Maintenance program for strength and endurance

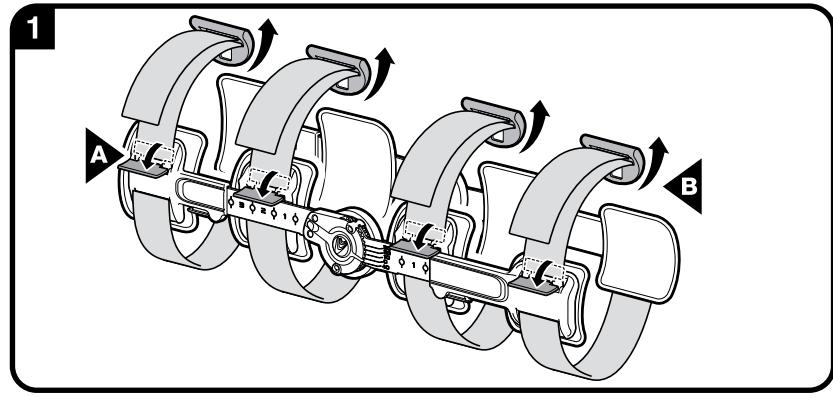
Comments:

Frequency: _____ times per week

Duration: _____ weeks

Signature: _____

Date: _____



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Schiffgraben 41
D-30175 Hannover
Germany

Post-Op Brace Fitting Instructions

Anleitung zum Anlegen der Schiene nach der Operation

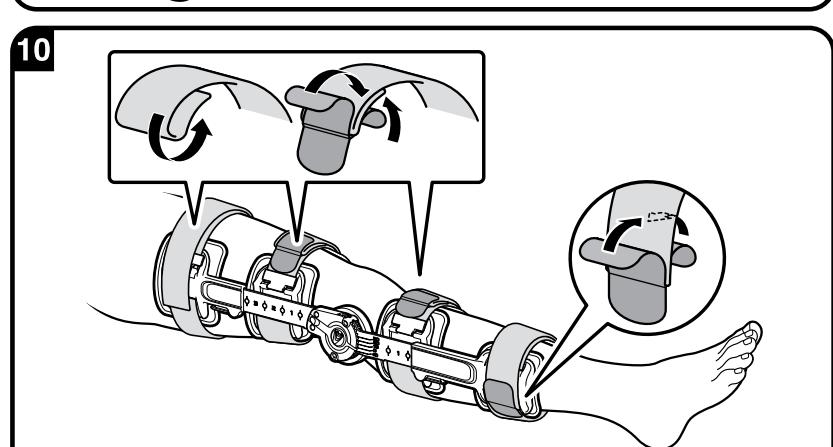
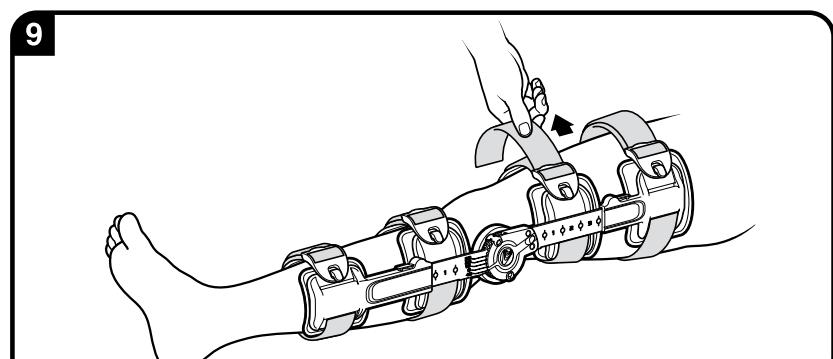
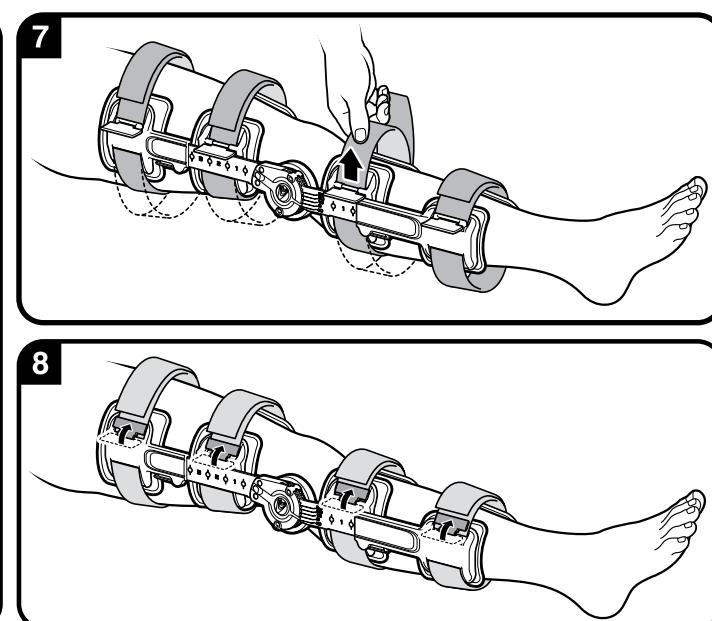
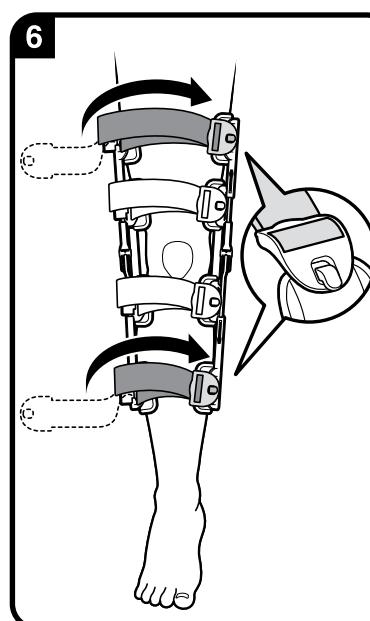
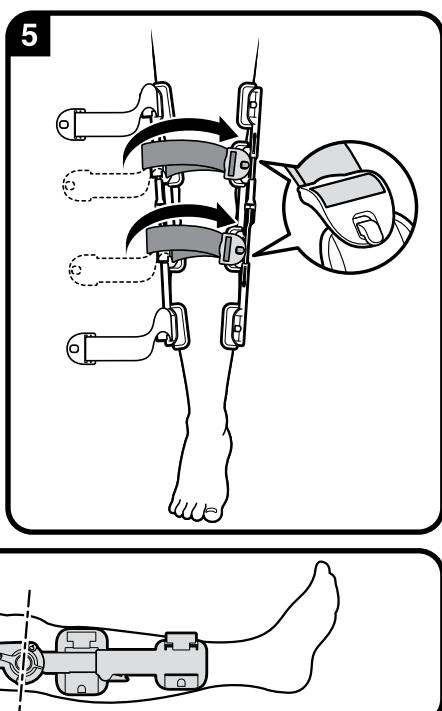
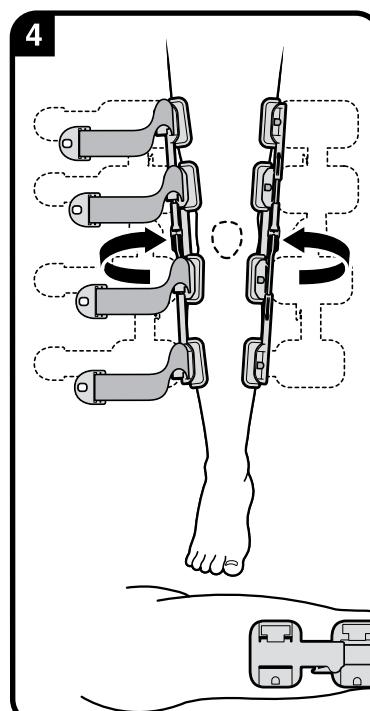
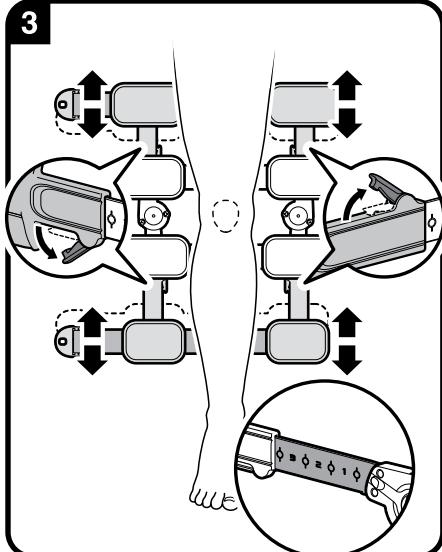
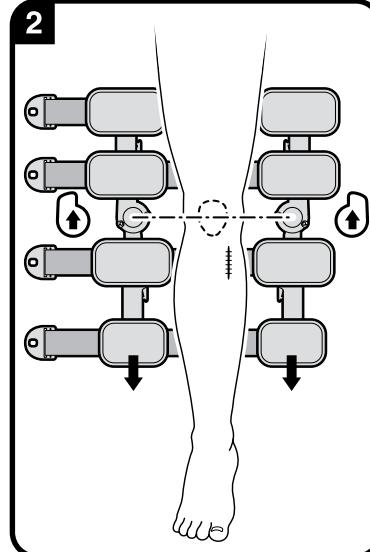
Istruzioni per l'adattamento post-operatorio del tute

Mise en place de l'orthèse postopératoire

Instrucciones de colocación de la rodillera postoperatoria

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WARNINGS

- WARNING: CAREFULLY READ USE/CARE INSTRUCTIONS AND WARNINGS PRIOR TO USE.
- WARNING: DO NOT REMOVE T SCOPE BRACE UNLESS INSTRUCTED BY YOUR MEDICAL TREATMENT PROFESSIONAL. DO NOT CHANGE RANGE OF MOTION HINGE SETTINGS WITHOUT SUPERVISION BY A MEDICAL PROFESSIONAL.
- WARNING: THIS DEVICE WILL NOT PREVENT OR REDUCE ALL INJURIES. PROPER REHABILITATION AND ACTIVITY MODIFICATION ARE ALSO AN ESSENTIAL PART OF A SAFE TREATMENT PROGRAM. CONSULT WITH YOUR MEDICAL TREATMENT PROFESSIONAL REGARDING SAFE AND APPROPRIATE ACTIVITY LEVEL WHILE WEARING THIS DEVICE.
- WARNING: IF YOU EXPERIENCE INCREASED PAIN, SWELLING, SKIN IRRITATION, OR ANY ADVERSE REACTIONS WHILE USING THIS PRODUCT, IMMEDIATELY CONSULT YOUR MEDICAL PROFESSIONAL.
- WARNING: THE HINGE ON THIS BRACE IS DESIGNED TO LIMIT AND/OR CONTROL RANGE OF MOTION. IT IS NOT DESIGNED TO STABILIZE YOUR KNEE WHEN YOU ARE WEIGHT-BEARING OR TAKE THE PLACE OF A WALKING AID. FOLLOW YOUR PHYSICIAN'S ADVICE REGARDING WEIGHT-BEARING AND ALWAYS USE A PROPER ASSISTANCE DEVICE, SUCH AS CRUTCHES OR A WALKER.
- CAUTION: FEDERAL LAW RESTRICTS THIS DEVICE TO SALE BY OR ON THE ORDER OF A LICENSED HEALTH CARE PRACTITIONER.
- CAUTION: FOR SINGLE PATIENT USE ONLY.

WARNUNGS

- WARNING: VOR GEBRAUCH BITTE SORGFALTIG ALLE ANWEISUNGEN ZUM GEBRAUCH UND ZUR PFLEGE SOWIE DIE WARNUNGEN DURCHESEN.
- WARNING: DIE T SCOPE-SCHIENE NUR AUF ÄRZTLICHE ANWEISUNG ENTFERNEN. DIE BEWEGUNGSSPIELRAUMEINSTELLUNG DES SCHARNIERS NUR UNTER AUFSEHT EINER MEDIZINISCHEN FACHKRAFT ÄNDERN.
- WARNING: DIESES GERÄT KANN NICHT ALLE VERLETZUNGEN VERHINDERN ODER LINDERN. ANGEMESSENE REHABILITATION UND MODIFIZIERUNG DER AKTIVITÄTEN SIND EIN UNERLÄSSLICHER BESTANDTEIL EINES SICHEREN BEHANDLUNGSPROGRAMMS. SPRECHEN SIE MIT IHREM MEDIZINISCHEM PFLEGEPERSONAL ÜBER DEN GEFAHRLOSEN UND ANGEMESSENEN AKTIVITÄTSGRAD WAHRHEITEN DES TRAGENS DIESER SCHIENE.
- WARNING: WENN BEI DER VERWENDUNG ERHÖhte SCHMERZEN, SCHWELLUNGEN, HAUTREIZUNG ODER ANDERE NEBENWIRKUNGEN AUFTREten, KONSULTIEREN SIE BITTE SOFORT IHREN ARZT.
- WARNING: DAS SCHARNIER AN DIESER SCHIENE IST ZUR EINSCHRÄNKUNG BZW. KONTROLLE DES BEWEGUNGSSPIELRAUMS KONZIPIERT. ES IST NICHT DAFÜR VORGesehen, DAS KNEE BEI GEWICHTSBELASTUNG ZU STABILISIEREN UND DIENt NICHT ALS ERSATZ FÜR EINE GEHILFE. BEACHTEN SIE DIE ÄRZTLICHEN ANWEISUNGEN IM HINBLICK AUF BELASTUNG UND VERWENDEN SIE STETS EINE PASSENDE GEHILFE WIE KRÜCKEN ODER EINEN WALKER.
- ACHTUNG: LAUT GESETZ DARf DIESES PRODUKT NUR VON ZUGELASSENEM MEDIZINISCHEM FACHPERSONAL ODER AUF DESEN ANWEISUNG VERKAUFT WERDEN.
- ACHTUNG: NUR ZUM GEBRAUCH FÜR EINEN INDIVIDuellen PATIENTEN VORGesehen.

AVVERTENZE

- AVVERTENZA - PRIMA DI UTILIZZARE IL DISPOSITIVO, LEGGERE ATTENTAMENTE LE ISTRUZIONI E LE AVVERTENZE RELATIVE ALL'USO E ALLA MANUTENZIONE.
- AVVERTENZA - NON Togliersi IL TUTOR T SCOPE SE NON DENTRO ORDINE DELL'OPERATORE SANITARIO. NON CAMBIARE IL RAGGIO DI MOVIMENTO DELLE CERNiere SENZA LA SUPERVISIONE DI UN OPERATORE SANITARIO.
- AVVERTENZA - QUESTO DISPOSITIVO NON PREVENE NÉ RIDUCE ALCUNA LESIONE. PARTE ESSENZIALE DI UN PROGRAMMA TERAPETICO COMPLETO SONO ANCHE UNA RIABILITAZIONE ADEGUATA E LA MODIFICA DELLE ATTIVITÀ SVOLENTE. CONSULTARE L'OPERATORE SANITARIO SUL LIVELLO DI ATTIVITÀ SICURO E APPROPRIATO MENTRE SI INDOSSE QUESTO DISPOSITIVO.
- AVVERTENZA - SE DURANTE L'USO SI ACCUSANO AUMENTO DI DOLORE, GONFIoRE, IRRITAZIONE CUTANEA O QUALUNQUE ALTRA REAZIONE AVVERSA, CONSULTARE IMMEDIATAMENTE IL PROPRIO OPERATORE SANITARIO.
- AVVERTENZA - LA CERNiera DI QUESTO TUTOR È CONCEPITA PER LIMITARE E/O REGOLARE IL RAGGIO DI MOVIMENTO; NON È PREVISTA PER LA STABILIZZAZIONE DEL GINOCCHIO QUANDO SI SPosta IL PESO SU QUELLA GAMBA, NÉ PER SOSTituIRE UN DISPOSITIVO DI DEAMBULAZIONE. SEGUIRE I CONSIGLI DEL MEDICO IN RELAZIONE ALL'APPoggIO DEL PESO E USARE SEMPRE UN APPROPRIATO DISPOSITIVO DI AIUTIO ALLA DEAMBULAZIONE, COME DELLE STAMPILLE O UN DEAMBULATORE.
- ATTENZIONE - VENDITA CONSENTITA SOLO AGLI OPERATORI SANITARI ABILITATI O DENTRO AUTORIZZAZIONE DEGLI STESSI.
- ATTENZIONE - ESCLUSIVAMENTE PER UN SINGOLO PATIENTE.

AVERTISSEMENTS

- AVERTISSEMENT : VEUILLEZ LIRE ATTENTIVEMENT LE MODE D'EMPLOI ET LES AVERTISSEMENTS AVANT USAGE.
- AVERTISSEMENT : NE RETirez PAS L'ORTHESE T SCOPE, SAUF SUR RECOMMANDATION SPECIFIQUE DE VOTRE PRATICien. NE MODifieZ PAS LE REGlage DE LA MOBILITE ARTICulaire SANS LA SUPERVISION D'UN PRATICien.
- AVERTISSEMENT : CE DISPOSITIF N'EST PAS DESTINE A PREVENIR OU A REDURe TOUTES LES LESIONS. UNE REEDUCATION APPROPRIEE ET UN CHANGEMENT D'ACTIVITE FONT EGAlEMENT PARTIE DES ELEMENTS ESSENTIELS A UN PROGRAMME DE TRAITEMENT REUSSI. ADDRESSEZ-Vous A VOTRE PRATICien POUR TOUTE QUESTION AU SUJET DU NIVEAU D'ACTIVITE APPROPRIEE ET SUR L'EMPLOI SANS DANGER DE CE DISPOSITIF.
- AVERTISSEMENT : EN CAS D'AUGMENTATION DE LA DOULEUR, D'ENFLURE, D'IRRITATION DE LA PEau O D'AUTRES REACTIONS INDESIRABLES LORS DE L'USAGE DE CE PRODUIT, CONSULTEZ IMMEDIATEMENT VOTRE PRATICien.
- AVERTISSEMENT : L'ARTICULATION DE CET ORTHÈSE EST CONCUE POUR LIMITER ET/OU CONTRôLER LA MOBILITE ARTICulaire. ELLE N'EST PAS DESTINEE A STABILISER VOTRE GENOU LORSQUE VOUS APPUYEZ DESSUS ET ELLE NE REMPLACE PAS UN DISPOSITIF D'AIDE A LA MARCHE. SUIVEZ LES RECOMMANDATIONS DE VOTRE MEDICIN EN CE QUI CONCERNE LA MISE EN APPU ET UTILISEZ TOUJOURS UN DISPOSITIF D'ASSISTANCE CORRECT TEL DES BEQUilles OU UN DEAMBULATEUR.
- ATTENTION : LA LOI FEDERALE AMERICaine N'AUTORISE LA VENTE DE CE DISPOSITIF QUE PAR UN PRATICien AGREe OU SUR SON ORDONNANCE.
- ATTENTION : USAGE RESERVE A UN SEUL PATIENT.

ADVERTENCIAS

- ADVERTENCIA: LEA DETENIDamente LAS INSTRUCCIONES DE USO/CUIDADO Y LAS ADVERTENcIAS ANTES DE USAR ESTE PRODUCTO.
- ADVERTENCIA: NO SE QUITE LA RODILLERA T SCOPE A MENOS QUE LO INDIQUE EL PROFESIONAL MÉDICO QUE LE PROPORCIONA TRATAMIENTO. NO CAMBIE LAS POSICIONES DE LA BISAGRA DE CONTROL DEL RANGO DE MOVIMIENTO SIN LA SUPERVISIÓN DE UN PROFESIONAL MÉDICO.
- ADVERTENCIA: ESTE APARATO NO PREVENE NI REDUCE TODAS LAS LESIONES. LA ADECUADA REHABILITACIÓN Y MODIFICACIÓN DE LA ACTIVIDAD SON TAMBÍEN PARTE ESencial DE UN PROGRAMA SEGURO DE TRATAMIENTO. CONSULE CON EL PROFESIONAL MÉDICO QUE LE PROPORCIONA TRATAMIENTO ACERCA DEL NIVEL SEGURO Y APROPIADO DE ACTIVIDAD MIENTRAS LLEVA ESTE APARATO.
- ADVERTENCIA: SI EXPERIMENTA AUMENTO DEL DOLOR, HINCHAZÓN, IRRITACIÓN DE LA PIEL O CUALQUIER REACCIÓN ADVERSAs AL USAR ESTE PRODUCTO, CONSULE INMEDIATAMENTE A SU PROFESIONAL MÉDICO.
- ADVERTENCIA: LA BISAGRA EN ESTA RODILLERA HA SIDO DISEñADA PARA LIMITAR Y/O CONTROLAR EL RANGO DE MOVIMIENTO. NO HA SIDO DISEñADA PARA ESTABILIZAR LA RODILLA CUANDO ESTE APOYANDO EL PESO EN ELLA, NI PARA SUSTITUIR A UN MEDIO DE AYUDA PARA CAMINAR. SIGA LOS CONSEJOS DE SU MEDICO SOBRE EL APOYO DEL PESO Y UTILICE SIEMPRE UN MEDIO DE AYUDA ADECUADO, COMO MULETAS O UN ANDADOR.
- PRECAUCIÓN: LA LEY FEDERAL RESTRIGE LA VENTA DE ESTE APARATO A LOS CASOS DE VENTA POR O BAJO LA ORDEN DE UN PROFESIONAL MÉDICO LICENCIADO.
- PRECAUCIÓN: PARA USO ÚNICO EN UN PACIENTE SOLAMENTE.

INITIAL APPLICATION BY A MEDICAL PROFESSIONAL ONLY!

- 1 Unlock strap clips (A), Unclip buckles (B).
- 2 Spread hinge bars apart, lay brace out flat, position device with knee centered between hinges. Orient the brace so the hinges are facing in the direction indicated and the small calf pads are towards the feet.
- 3 Loosen friction clips on the telescoping bars. For proper fit, slide upper and lower telescoping hinge bars to accommodate leg length. Lock friction clips. Hinge bar length indicators assist in verifying the consistent length selection on thigh and calf.
- 4 Position hinge bars laterally and medially to the leg, center hinge at the knee joint.
- 5 Loosely fasten the 2 straps closest to the knee.
- 6 Loosely fasten the remaining 2 straps.
- 7 Pull straps tight to remove slack behind the leg. Be careful to maintain the lateral and medial positions of the hinge bars.
- 8 Lock strap lock clips.
- 9 Pull straps tight through the buckles. Be careful to maintain the lateral and medial positions of the hinge bars.
- 10 Secure strap ends, use hook and loop Y-tabs at strap ends to affix straps. It may be necessary to shorten straps by folding them over before attaching Y-tabs.

ROM (RANGE-OF-MOTION) HINGE ADJUSTMENTS:

- 11 Extension limit settings may be selected between -10° (Hyperextension) and 70° by pulling the tab out and sliding it to desired position.
- 12 Flexion limit settings may be selected between -10° and 120° (represented as last tick mark on scale).
- 13 The hinge may be locked by sliding the quick lock button into the locked position at any one of 5 positions: -10° (hyperextension), 0° (Neutral), 10°, 20°, 30° of flexion.

BRIDGETECH INCISION PAD APPLICATION AND ADJUSTMENTS:

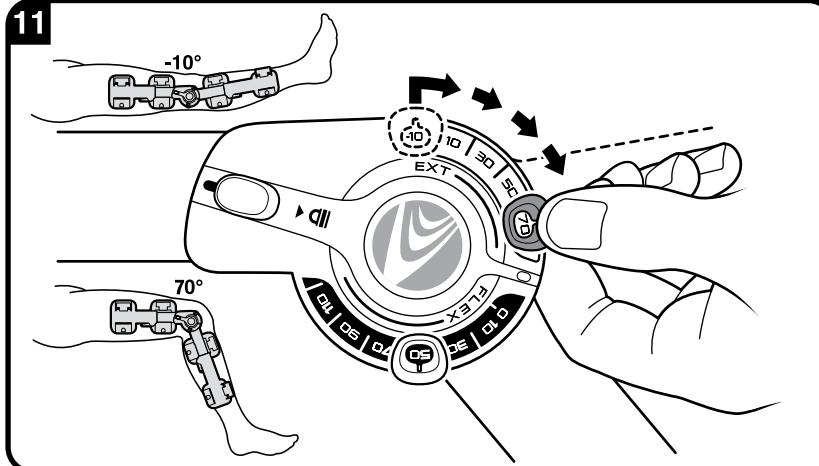
- 14 The BridgeTech Incision Pad can be added to the T Scope Premier to alleviate pressure around the incision site. You will need to replace one of the existing pads when using the BridgeTech Incision Pad.
- 15 To replace one of the existing pads, remove the existing pad from the cuff. Make sure the incision pad will be placed on the appropriate cuff, so it is on same side as the incision. The piece of double sided hook may be attached to the back of this pad or could remain on the strap. If it is on the pad, remove and affix to the middle of the strap that is attached to the cuff.
- 16 Apply the BridgeTech Incision Pad to the cuff with the flat side down, making sure the tear-away sections point away from the medial (middle) side of the brace. The tear-away sections will be in the proper location once the brace is applied.
- 17 To bridge an incision point, remove individual tear-away sections as needed.
- 18 To provide additional support and pressure relief, affix the tear-away sections of the BridgeTech Incision Pad to the strap that is below the knee on either side of the tibia.

USE AND CARE OF YOUR T SCOPE BRACE:

After initial application, the T Scope may be removed and reapplied by unclipping the buckles only.

Hand wash the foam pads and straps with mild soap and air dry. Do not place pads or straps into a mechanical dryer.

Extra foam pads are available from Customer Care: (800) 321-0607. The BridgeTech Incision Pad is available as an accessory for an additional charge.



- DAS ERSTMALIGE ANLEGEN DARB NUR VON EINEM ARZT ODER VON QUALIFIZIERTEM PFLEGEPERSONAL AUSGEFÜHRT WERDEN!**
- 1 Verschlussclips der Gurte (A) lösen und Schnallen (B) ausziehen.
 - 2 Scharnierstangen auseinanderziehen, Schiene auseinandergebreit hindlegen und Vorrichtung so positionieren, dass das Knie zwischen Scharnieren zentriert ist. Schiene so ausrichten, dass die Scharniere in die angezeigte Richtung und die kleinen Wadenpolster in Fußrichtung zeigen.
Beispiel: rechtes Bein.
 - 3 Reibschlusssclips am Teleskopstangen lockern. Obere und untere Teleskop-Scharnierstangen je nach Beinlänge verschieben, damit sie ordnungsgemäß sitzen. Reibschlusssclips verriegeln. Die richtige Länge auf Schenkel und Wade wird anhand der Markierungen an den Scharnierstangen überprüft.
 - 4 Scharnierstangen mit dem mittleren Scharnier am Kniegelenk lateral und medial zum Bein positionieren.
 - 5 Beide knienahen Gurte locker schließen.
 - 6 Restliche 2 Gurte locker schließen.
 - 7 Gurte so fest anziehen, dass sich kein Spielraum hinter dem Bein befindet. Sicherstellen, dass sich die Scharnierstangen nicht seitlich oder mittig verschieben.
 - 8 Clips an den Gurten schließen.
 - 9 Gurte fest durch die Schnallen ziehen. Sicherstellen, dass sich die Scharnierstangen nicht seitlich oder mittig verschieben.
 - 10 Gurtenden sichern und Gurte mit den Klettverschluss-Laschen an den Gurtenden befestigen. Die Gurte können vor Befestigung der Laschen ggf. umgefaltet und gekürzt werden.

NNM-SCHARNIEREINSTELLUNGEN (NEUTRAL-NUL-METHODE):

- 11 Die Streckgrenze kann zwischen -10 Grad (Überstreckung) und 70 Grad eingestellt werden, indem die Lasche herausgezogen und in die gewünschte Position gebracht wird.
- 12 Die Beugegrenze kann zwischen -10 und 120 Grad (letzte Markierung auf der Skala) eingestellt werden.
- 13 Schnellverschlussknopf in einer der 5 Positionen arretieren, um das Scharnier zu sperren: -10 (Überstreckung), 0 Grad (neutral), 10 Grad, 20 Grad, 30 Grad Beugung.

ANLEGEN UND EINSTELLEN DES BRIDGETECH-INZISIONSPOLSTERS:

- 14 Das BridgeTech-Inzisionspolster kann zur T-Scope-Premier-Schiene hinzugefügt werden, um den Druck um die Inzisionsstelle herum zu reduzieren. Bei Verwendung des BridgeTech-Inzisionspolsters muss eines der vorhandenen Polster ausgewechselt werden.
- 15 Dazu ein vorhandenes Polster aus der Manschette entfernen. Sicherstellen, dass das Inzisionspolster an der richtigen Manschette positioniert wird, damit es sich auf derselben Seite wie die Inzision befindet. Der doppelseitige Klettverschluss kann an der Rückseite dieses Polsters befestigt werden oder am Gurt verbleiben. Befindet er sich am Polster, wird er entfernt und mittig auf dem Gurt der Manschette befestigt.
- 16 BridgeTech-Inzisionspolster mit der flachen Seite nach unten auf der Manschette anbringen. Sicherstellen, dass die perforierten Bereiche von der Mitte der Schiene weg zeigen. Die perforierten Bereiche werden sich an der richtigen Stelle befinden, wenn die Schiene angelegt ist.
- 17 Zu Überbrückung einer Inzisionsstelle werden die einzelnen perforierten Bereiche nach Bedarf entfernt.
- 18 Für zusätzliche Stütze und Druckentlastung können die perforierten Bereiche des BridgeTech-Inzisionspolsters am Gurt befestigt werden, der sich unterhalb des Knees links oder rechts des Schienbeins befindet.

GEBRAUCH UND PFLEGE DER T-SCOPE-SCHIENE:

Nach dem ersten Anlegen brauchen nur die Schnallen geöffnet zu werden, um die T-Scope-Schiene zu entfernen und wieder anzulegen.
Schaumstoffpolster und Gurte mit einem milden Waschmittel von Hand reinigen und an der Luft trocknen lassen. Die Polster und Gurte nicht in einem Wäschetrockner trocknen.
Zusätzliche Schaumstoffpolster sind beim Kundendienst erhältlich: (800) 321-0607. Das BridgeTech-Inzisionspolster ist als Zubehör gegen Aufpreis erhältlich.

L'APPLICAZIONE INIZIALE DEVE ESSERE ESEGUITA ESCLUSIVAMENTE DA UN OPERATORE SANITARIO!

- 1 Aprire i fermagli dei cinturini (A) e sganciare le fibbie (B).
- 2 Allungare le barre delle cerniere, distendere il tutore in piano e posizionare il dispositivo con il ginocchio centrato fra le cerniere. Orientare il tutore in modo che le cerniere siano rivolte nella direzione indicata e che i piccoli cuscini del polpaccio siano rivolti verso i piedi.
Esempio: gamba destra.
- 3 Allentare i fermagli antisfilamento sulle barre telescopiche. Per un adattamento ottimale, far scivolare le barre telescopiche superiore e inferiore delle cerniere per adattarle alla lunghezza della gamba. Bloccare i fermagli antisfilamento. Gli indicatori della lunghezza delle barre delle cerniere aiutano a verificare la scelta di una lunghezza omogenea su coscia e polpaccio.
- 4 Posizionare le barre delle cerniere lateralmente e medialmente rispetto alla gamba, centrando le cerniere a livello dell'articolazione del ginocchio.
- 5 Fissare senza stringerli i 2 cinturini più vicini al ginocchio.
- 6 Chiudere senza stringerli i restanti 2 cinturini.
- 7 Tendere bene i cinturini per eliminare il lasso dietro la gamba. Fare attenzione a mantenere le posizioni laterale e mediale delle barre delle cerniere.
- 8 Chiudere i fermagli di bloccaggio dei cinturini.
- 9 Stringere bene i cinturini attraverso le fibbie. Fare attenzione a mantenere le posizioni laterale e mediale delle barre delle cerniere.
- 10 Fissare le estremità dei cinturini usando le lingue a Y a uncini e asole situate ai capi dei cinturini stessi. Potrebbe essere necessario accorciare i cinturini ripiegandoli su sé stessi prima di fissare le lingue a Y.

REGOLAZIONI DEL RAGGIO DI MOVIMENTO DELLE CERNIERE

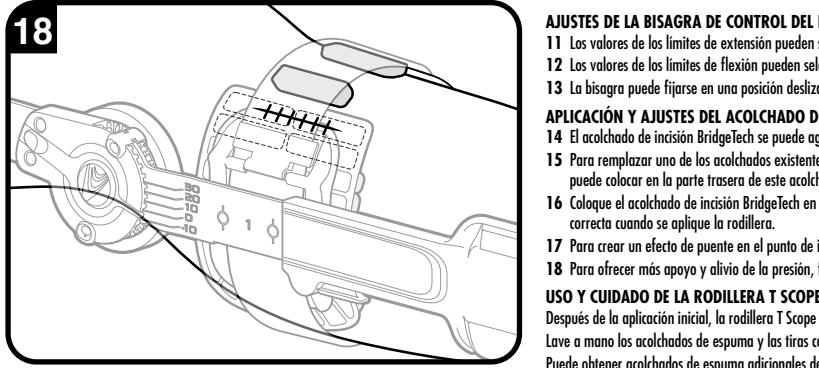
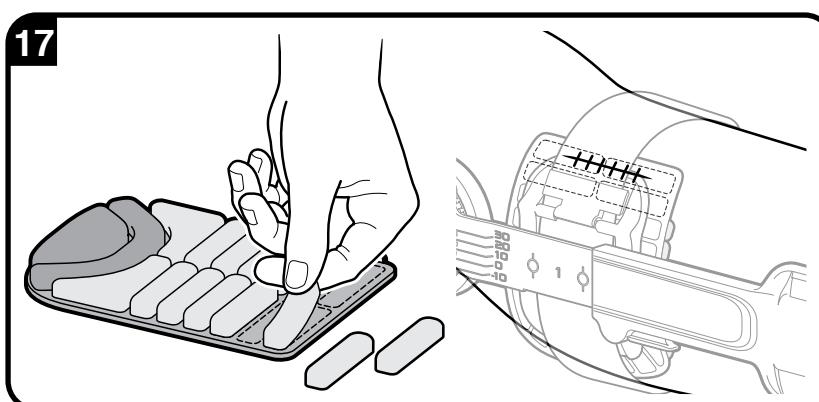
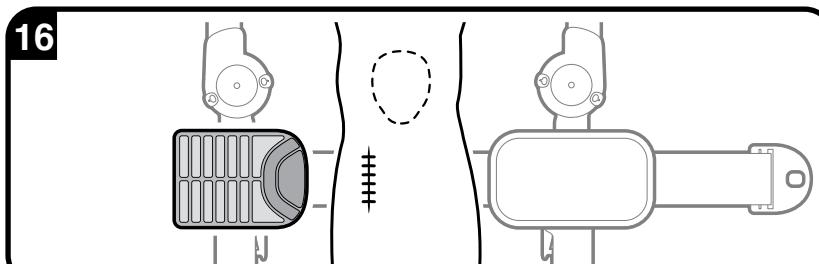
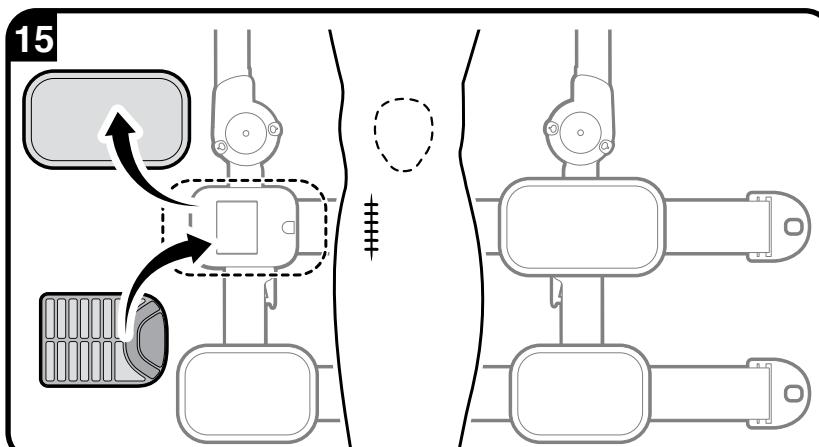
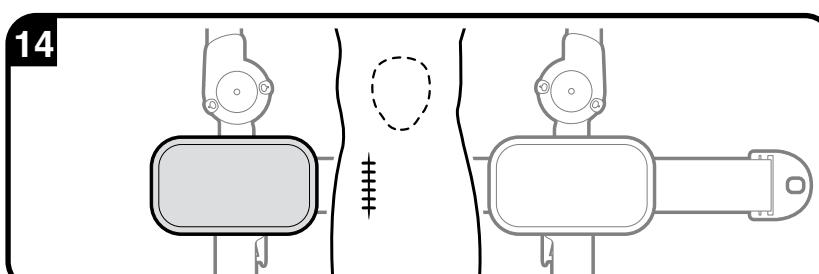
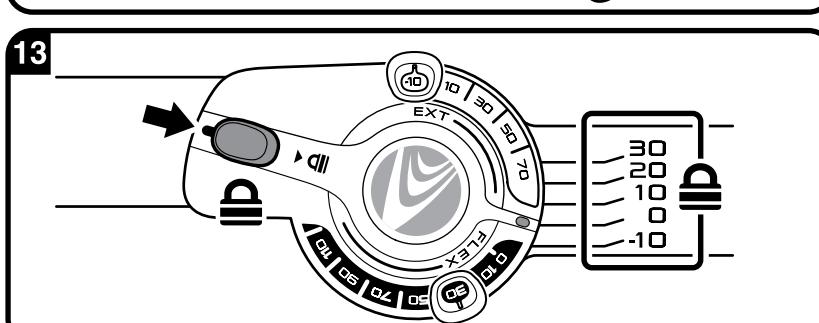
- 11 Le impostazioni del limite di estensione possono essere selezionate fra -10° (iperestensione) e 70°, tirando in fuori la lingua e facendola scorrere sulla posizione desiderata.
- 12 Le impostazioni del limite di flessione possono essere selezionate fra -10° e 120° (l'ultimo segno sulla scala rappresenta i 120°).
- 13 Si può fermare la cerniera facendo scorrere il pulsante di bloccaggio rapido in una qualsiasi delle 5 posizioni di arresto disponibili: -10° (iperestensione), 0° (posizione neutra), 10°, 20°, 30° di flessione.

APPLICAZIONE E REGOLAZIONI DEL CUSCINETTO PER INCISIONI BRIDGETECH

- 14 Al tutore T Scope Premier è possibile aggiungere il cuscinetto per incisioni BridgeTech per alleviare la pressione attorno al sito dell'incisione. Quando si usa il cuscinetto per incisioni BridgeTech, è necessario sostituire uno dei cuscinetti esistenti.
- 15 Per sostituire uno dei cuscinetti esistenti, rimuoverlo dal manicotto. Assicurarsi che il cuscinetto per incisioni sia sistemato sul manicotto appropriato, in modo che si trovi sullo stesso lato dell'incisione. Il pezzo di materiale a doppia faccia con uncini potrebbe rimanere fissato alla parte posteriore di questo cuscinetto, oppure potrebbe restare sul cinturino. Se si trova sul cuscinetto, rimuoverlo e fissarlo sulla parte mediale del cinturino collegato al manicotto.
- 16 Applicare il cuscinetto per incisioni BridgeTech sul manicotto, con il lato piatto rivolto verso il basso, assicurandosi che le sezioni staccabili siano rivolte in direzione opposta rispetto al lato mediale (centrale) del tutore. Le sezioni staccabili si troveranno nell'ubicazione corretta una volta applicato il tutore.
- 17 Per formare un ponte protettivo sopra un punto di incisione, rimuovere secondo la necessità le singole sezioni staccabili.
- 18 Per fornire ulteriore supporto o sollievo dalla pressione, collocare le sezioni staccabili del cuscinetto per incisioni BridgeTech sul cinturino che si trova al di sotto del ginocchio, su entrambi i lati della tibia.

USO E MANUTENZIONE DEL TUTOR T SCOPE

Dopo l'applicazione iniziale, è possibile rimuovere il tutore T Scope e riapplicarlo semplicemente sganciando le fibbie.
Lavare a mano i cuscinetti in espanso e i cinturini con un detergente neutro, e farli asciugare all'aria. Non mettere i cuscinetti né i cinturini in asciugatrice.
I cuscinetti in espanso di ricambio sono disponibili presso il reparto di Assistenza alla clientela: 800 321 0607. Il cuscinetto per incisioni BridgeTech è disponibile come accessorio acquistabile separatamente.



LA MISE EN PLACE INITIALE NE PEUT ETRE EFFECTUEE QUE PAR UN PRATICIEN !

- 1 Déverrouillez les brides de la sangle (A), puis ouvrez les boucles (B).
- 2 Écartez les barres des articulations, étendez l'orthèse à plat, puis placez le dispositif avec le genou centré entre les articulations. Orientez l'orthèse de manière à ce que les articulations soient dirigées dans la direction indiquée et que les petits coussinets de mollet soient tournés vers le pied.
Exemple : jambe droite.

3 Desserez les brides à friction sur les barres coulissantes. Pour une bonne mise en place, faites glisser les barres d'articulation coulissantes supérieure et inférieure de manière à la ajuster à la longueur de la jambe. Verrouillez les brides à friction. Les indicateurs de longueur de barres d'articulation permettent de s'assurer que la sélection de longueur est constante sur la cuisse et le mollet.

4 Placez les barres d'articulation en position latérale et médiale par rapport à la jambe, puis centrez l'articulation au niveau de l'articulation du genou.

5 Attachez sans les serrer les 2 sangles les plus proches du genou.

6 Attachez sans serrer les 2 sangles restantes.

7 Tirez à fond sur les sangles de manière à supprimer le jeu derrière la jambe. Veillez à maintenir les positions latérales et médiales des barres d'articulation.

8 Fermez les brides de verrouillage des sangles.

9 Tirez les sangles à fond à travers les boucles. Veillez à maintenir les positions latérales et médiales des barres d'articulation.

10 Attachez les extrémités des sangles et utilisez les pattes en « Y » à fermeture auto-adhesive pour fixer les sangles. Il sera peut-être nécessaire de raccourcir les sangles en les repliant avant d'attacher les pattes en « Y ».

REGLAGE DES ARTICULATIONS POUR LA MOBILITE ARTICULAIRE :

- 11 Les réglages de limites d'extension peuvent être effectués entre -10° (hyperextension) et 70°, en tirant sur la patte pour la faire sortir et en la faisant glisser à la position souhaitée.
- 12 Les réglages de limites de flexion peuvent être effectués entre -10° et 120° (représenté par la dernière petite ligne droite sur l'échelle).
- 13 L'articulation peut être verrouillée en faisant glisser le bouton à verrouillage rapide en position verrouillée sur l'une des 5 positions suivantes : -10° (hyperextension), 0° (neutre), 10°, 20° et 30° de flexion.

MISE EN PLACE ET REGLES DU COUSSINET D'INCISION BRIDGETECH :

- 14 Le coussinet d'incision BridgeTech peut être ajouté à l'orthèse T Scope Premier pour relâcher la pression autour du site d'incision. Lorsque vous utilisez le coussinet d'incision BridgeTech, vous devrez remplacer l'un des coussinets présents.
- 15 Pour remplacer l'un des coussinets présents, refiez le coussinet en question de la bande. Assurez-vous que le coussinet d'incision est placé sur la bande appropriée, de manière à ce qu'il se trouve sur le même côté que l'incision. Le morceau de fermeture crochets recto-verso peut être attaché sur l'arrière de ce coussinet ou il peut rester sur la sangle. S'il se trouve sur le coussinet, refiez-le et fixez-le sur le milieu de la sangle qui est attachée sur la bande.

16 Appliquez le coussinet d'incision BridgeTech sur la bande avec le côté plat tourné vers le bas, en vous assurant que les sections détachables ne sont pas dirigées vers le côté médial (milieu) de l'orthèse. Les sections détachables seront au bon emplacement une fois l'orthèse mise en place.

17 Pour éviter de toucher un point d'incision, refiez les sections détachables individuellement selon les besoins.

18 Pour fournir un support supplémentaire et relâcher la pression, fixez les sections détachables du coussinet d'incision BridgeTech sur la sangle qui se trouve sous le genou des deux côtés du tibia.

UTILISATION ET ENTRETIEN DE VOTRE ORTHESE T SCOPE :

Une fois réglée et mise en place, l'orthèse T Scope s'enlève et se remet en défaisant tout simplement les boucles.

Lavez les coussinets en mousse et les sangles à la main avec un savon doux, puis laissez-les sécher à l'air. Ne mettez pas les coussinets ou les sangles dans un séche-linge mécanique.

Vous pouvez commander des coussinets en mousse supplémentaires en appelant le service à la clientèle au : (800) 321-0607. Le coussinet d'incision BridgeTech est un accessoire qui s'achète séparément.

¡SOLAMENTE UN PROFESIONAL MÉDICO DEBE EFECTUAR LA APLICACIÓN INICIAL!

- 1 Abra los clips de fijación de la tira (A), desenganche las hebillas (B).
- 2 Separe las barres de bisagra, extienda la rodillera, coloque el dispositivo con la rodilla centrada entre las bisagras. Oriente la rodillera de manera que las bisagras queden mirando en la dirección indicada y los acolchados de la pantorrilla, más pequeños, hacia los pies.
Ejemplo: pierna derecha.

3 Afloje los clips de fricción de las barras telescópicas. Para lograr un ajuste correcto, deslice las barras telescópicas de bisagra superior e inferior a fin de acomodar la pierna en toda su longitud. Cierra los clips de fricción. Los indicadores de longitud de las barras de bisagra permiten verificar la concordancia de las longitudes seleccionadas en el muslo y en la pantorrilla.

4 Coloque las barras de bisagra lateral y medialmente con respecto a la pierna, y centre la bisagra en la articulación de la rodilla.

5 Enganche, sin apretar, las 2 tiras más próximas a la rodilla.

6 Enganche, sin apretar, las 2 tiras restantes.

7 Tire de las tiras para apretarlas hasta que no quede ninguna holgura detrás de la pierna. Tenga cuidado de conservar las posiciones lateral y medial de las barras de bisagra.

8 Cierre los clips de fijación de las tiras.

9 Tire de las tiras para apretarlas a través de las hebillas. Tenga cuidado de conservar las posiciones lateral y medial de las barras de bisagra.

10 Sujete los extremos de las tiras, utilice las lengüetas en Y de gancho y lazo en los extremos de las tiras para fijarlas. Puede que tenga que doblar las tiras para acortarlas, antes de introducirlas en las lengüetas en Y.

AJUSTES DE LA BISAGRA DE CONTROL DEL RANGO DE MOVIMIENTO:

- 11 Los valores de los límites de extensión pueden seleccionarse entre -10° (hiperextensión) y 70° tirando de la lengüeta hacia fuera y deslizándola a la posición deseada.
- 12 Los valores de los límites de flexión pueden seleccionarse entre -10° y 120° (representada como la última marca indicadora en la escala).
- 13 La bisagra puede fijarse en una posición designando el botón de fijación rápida a la posición de bloqueo en cualquiera de las 5 posiciones: -10° (hiperextensión), 0° (Neutra), 10°, 20°, 30° de flexión.

APLICACION Y AJUSTES DEL ACOLCHADO DE INCISION BRIDGETECH:

- 14 El acolchado de incisión BridgeTech se puede agregar a la rodillera T Scope Premier para aliviar la presión alrededor del área de la incisión. Deberá reemplazar uno de los acolchados existentes cuando use el acolchado de incisión BridgeTech.
- 15 Para remplazar uno de los acolchados existentes, retire el acolchado existente en la pieza rígida. Asegúrese de que el acolchado de incisión se coloque en la pieza rígida adecuada de manera que se encuentre en el mismo lado de la incisión. La pieza de doble cara de gancho se puede colocar en la parte frontal de este acolchado o permanecer en la tira. Si se coloca en el acolchado, refírela y fíjela en el medio de la tira que se sujetó a la pieza rígida.
- 16 Coloque el acolchado de incisión BridgeTech en la pieza rígida con el lado aplomado hacia abajo. Asegúrese de que las secciones que se desprenden apunten hacia fuera del lado medial (el centro) de la rodillera. Las secciones que se desprenden quedarán en la posición correcta cuando se aplique la rodillera.
- 17 Para crear un efecto de puente en el punto de incisión, retire individualmente las secciones que se desprenden según sea necesario.
- 18 Para ofrecer más apoyo y alivio de la presión, fije las secciones que se desprenden del acolchado de incisión BridgeTech a la tira debajo de la rodilla en cualquier lado de la tibia.

Después de la aplicación inicial, la rodillera T Scope puede quitarse y volverse a colocar con sólo desenganchar las hebillas.

Lave a mano los acolchados de espuma y las tiras con jabón suave, y sequé al aire. No sequé los acolchados ni las tiras en una secadora.

Puede obtener acolchados de espuma adicionales del Departamento de Atención al Cliente: (800) 321-0607. El acolchado de incisión BridgeTech se ofrece como un accesorio por un cargo adicional.