CLUBFOOT ACHILLES TENOTOMY TECHNIQUE

USING THE SINGLE-USE, STERILE PACKED
CLUBFOOT ACHILLES TENOTOMY (CAT) KIT

We **WORK** so they can **PLAY**™

WISHBONE MEDICAL

CLUBFOOT ACHILLES **TENOTOMY**

More than 100,000 babies are born around the world each year with clubfoot – one of the most prevalent congenital deformities to date, with approximately 80% of cases seen in developing countries.[1] Serial manipulation and casting come closest to achieving effective treatment, so that the child's feet will be functional and pain-free with full mobility.[1]

About 90% of children who undergo Ponseti method treatment for clubfoot still have an abnormally tight Achilles tendon after the casting process is complete.[2] A pediatric orthopedic surgeon can correct the problem with an outpatient Achilles tenotomy procedure to improve dorsiflexion of the foot, avoiding extensive surgery.

Tenotomy corrects the rigid equinus with a complete cut through the Achilles tendon. This is important as the collagen of the Achilles tendon is more restrictive than the joint capsule, and ligaments do not respond as well to lengthening.[3] The tendon heals rapidly, within three weeks post-surgery.[1]

Presented by Dr. John Herzenberg

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For product information, including indications, contraindications, warnings, precautions and potential adverse effects, visit www.WishBoneMedical.com.

THE FIRST AND ONLY

CLUBFOOT Achilles TENOTOMY (CAT) KIT

KIT COMPONENTS

1. Scalpel Handle Dissector
2. Mini Blade #6400
3. Mini Blade #6700
4. Mini Blade #6900
5. 17" x 24" OR Towel (x4)
6. 1% Lidocaine, 5ml
7. 3cc Syringe Leur Lock
8. 25-Gauge Needle
9. Metz Curved 5.5" Scissors
10. 3.5" Mosquito Clamp
11. 4" x 4" Gauze (x6)
12. Chloraprep, 3ml (x2)
13. Adhesive Bandage (x2)
14. AntibioticOintment, 0.9cc
15. Medium Exam Gloves (Purple, Nitrile PF)
16. Large Exam Gloves (Green, Ntrile PF)
17. Webril 2" X 4Yd

CAT Convenience Kits: Sterile Packed, Ready to Go

Your team works to help as many patients as possible. Convenience kits save valuable time in- and outside of the clinic (or operating room) so you can do just that. Designed to streamline an Achilles tenotomy from start to finish, the ***complete, sterile packed*** "CAT" Kit provides all medical and surgical items necessary to perform the procedure more efficiently than ever.

SURGICAL TECHNIQUE

Note: Prior to the tenotomy, order the brace and schedule a brace fitting. The foot must be in a dorsiflexed and abducted position to fit into brace.

1 PATIENT POSITIONING

An Achilles tenotomy may be done by the clinician in the clinic or operating room setting.

Two people are required – one to hold the foot and another to perform the tenotomy. The patient is positioned by gripping the child's calves, with his or her knee in extension.

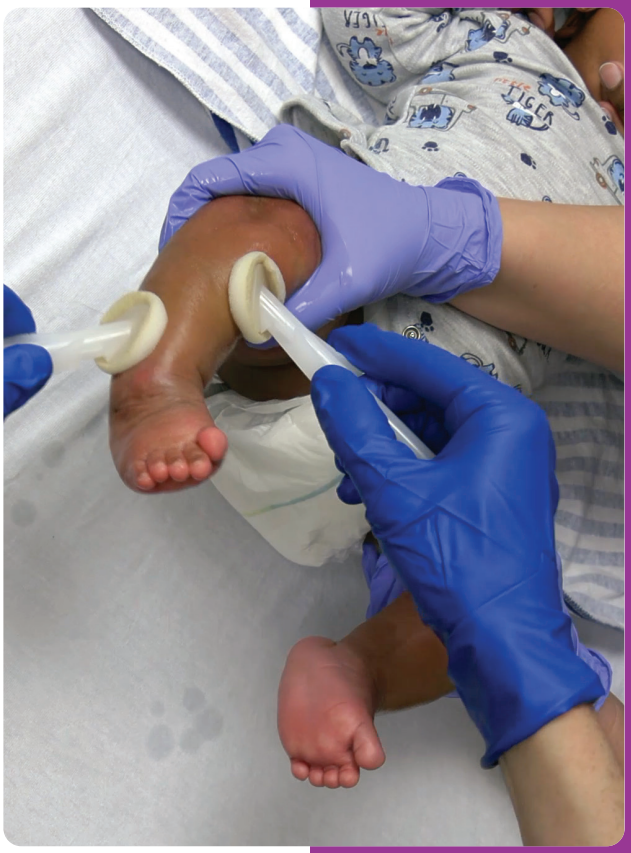


Fig. 1

2 STERILIZE

Generously apply antiseptic circumferentially to the foot, ankle, and lower leg (Fig. 1).

3 PREPARE AND APPLY DRAPES TO PATIENT

Use the scissors supplied with the kit to make one or two fenestrations in the blue cotton surgical towel depending on if the case is unilateral or bilateral (Fig. 2).

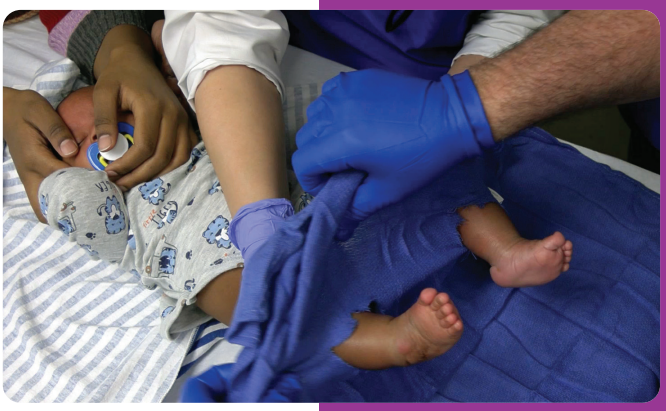


Fig. 2

SURGICAL TECHNIQUE (CONT.)

4 INJECTION PRE-TENOTOMY

Palpate the tight Achilles tendon while dorsiflexing the foot to identify its location (Fig. 3). Inject 1/10cc of local anesthetic medial to the Achilles tendon, approximately 1cm proximal to its insertion (Fig. 4).

Note: If too much anesthetic is used, it may be difficult to feel the tendon.

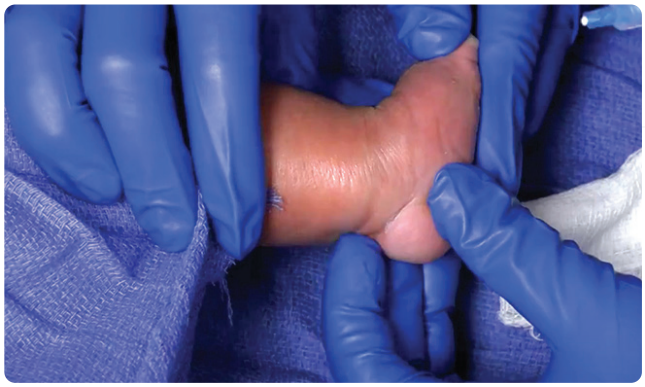


Fig. 3

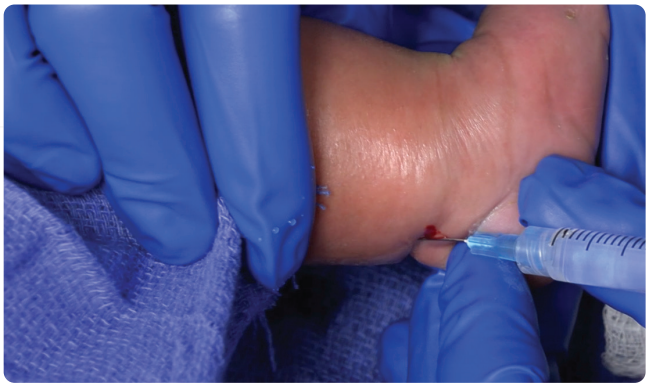


Fig. 4

5 SKIN INCISION

Make a tiny puncture using the selected knife blade on the Scalpel Handle Dissector anteromedial to the Achilles tendon, 1cm proximal to its insertion (Fig. 5).

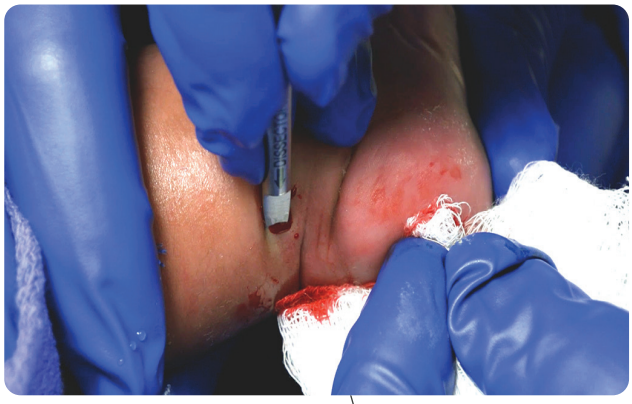
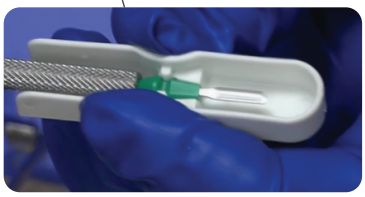


Fig. 5



For cutting: *#6400 blade attached to the Scalpel Handle Dissector*

6 DEFINE THE ACHILLES TENDON BORDERS

Next, reverse the Scalpel Handle Dissector and insert the blunt dissector end into the incision utilizing the dissector to define a space anterior and posterior to the Achilles tendon, free of the neurovascular bundle (Fig. 6).

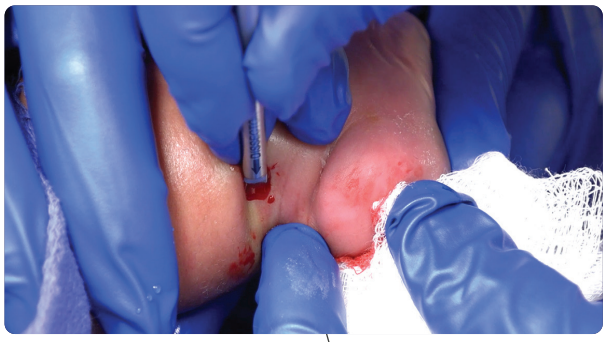


Fig. 6

For dissecting: *Blunt dissector end of the Scalpel Handle Dissector*

SURGICAL TECHNIQUE (CONT.)

7 CUTTING THE TENDON

Re-insert the Scalpel Handle Dissector utilizing the blade end, once again, just anterior to the Achilles tendon in the previously identified space created in Step 6 (Fig. 7).

Turn the scalpel perpendicular to the tendon and dorsiflex the foot (Fig. 8) while applying pressure on the blade to create the tenotomy. Be careful not to button-hole through the skin (Fig. 9).

The "release" obtained after a complete tenotomy is characterized by a palpable "pop." The result will be 10-20 degrees of additional dorsiflexion.

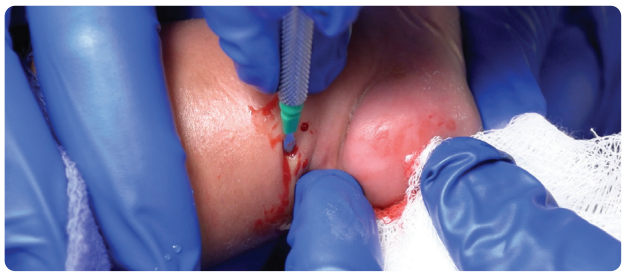


Fig. 7

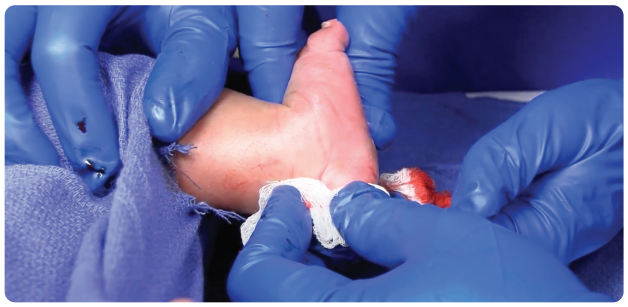


Fig. 8

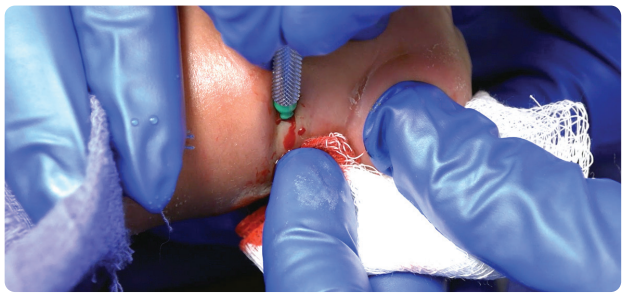


Fig. 9

8 USE SCALPEL HANDLE DISSECTOR TO ENSURE A COMPLETE TENOTOMY

Re-insert Scalpel Handle Dissector using the blunt dissector end to palpate for any residual tendon fibers which may have been left uncut. Using a finger palpate the defect in the tendon through the skin (Fig. 10).

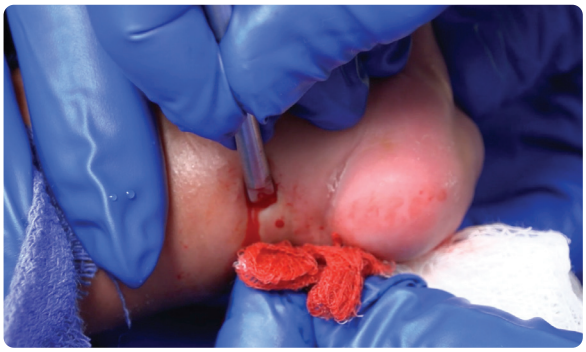


Fig. 10

9 INJECT THROUGH TENOTOMY SITE

Additional local anesthetic may be injected through the tenotomy site at the skin edges. This will also facilitate hemostasis. If any bleeding is present apply pressure with a gauze for 60 seconds.

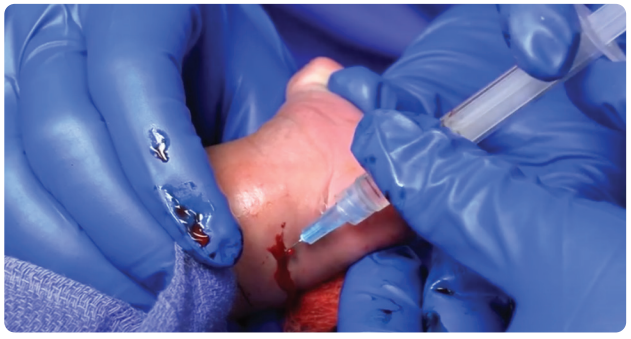


Fig. 11

SURGICAL TECHNIQUE (CONT.)

10 CLOSURE WITH ABSORBABLE SIMPLE SUTURE

Utilizing the suture, close the wound (Fig. 12) and cover with Neosporin ointment and an adhesive bandage (Fig. 14).

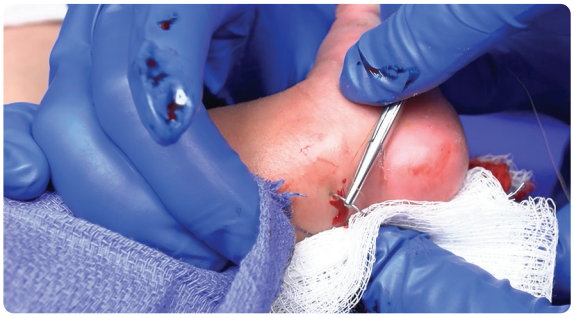


Fig. 12

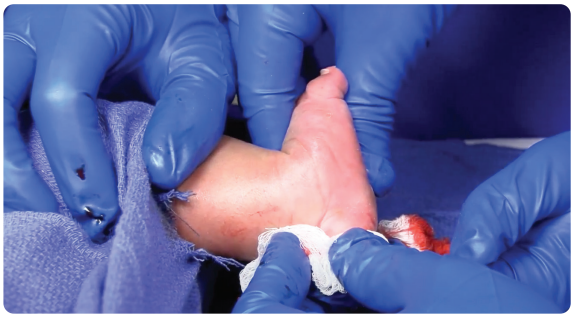


Fig. 13

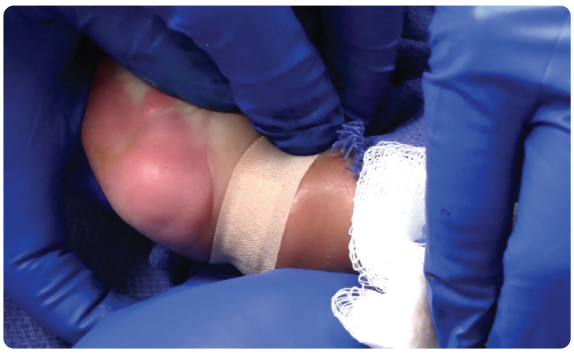


Fig. 14

11 CASTING

Apply the cast with the feet in maximum dorsiflexion and external rotation (Fig. 15).

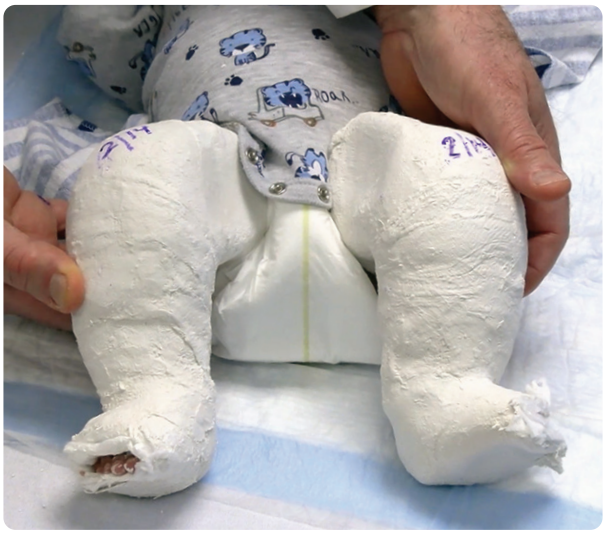


Fig. 15

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Caution: Federal law restricts this device to sale by or on the order of a physician.

For product information, including indications, contraindications, warnings, precautions and potential adverse effects, visit **www.WishBoneMedical.com**.

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