Zone Specific® II

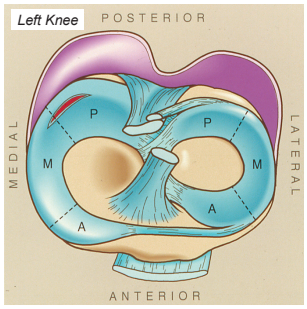
Meniscal Repair System

Linvatec
A ConMed Company

Surgical Technique

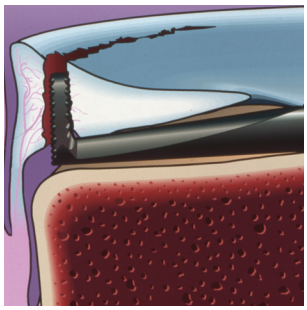
Surgical technique described by Lonnie Paulos, M.D., and Thomas Rosenberg, M.D., Salt Lake City, Utah

The Zone Specific® II Meniscal Repair System has been designed to address meniscal tears in the anterior, middle and posterior zones of the meniscus using an "inside out" approach. Six pre-bent cannulas feature thin barrels, fluid venting, and safe loading. Four meniscal rasp styles are also included in the system.



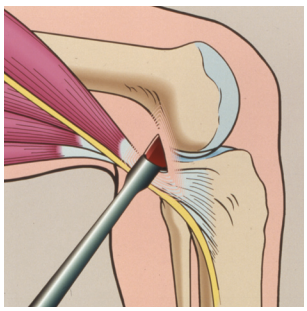
1

Selection of a repairable meniscal tear begins with visualization through the contralateral portal and a probe in the ipsilateral portal. Repairable tears are generally limited to longitudinal tears near the periphery of the meniscus. In this technique, the repair of a posterior medial tear for a left knee is demonstrated



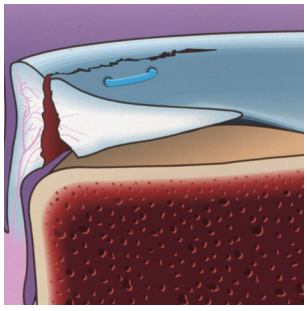
2

Preparation of the tear is done arthroscopically by debriding the meniscal rim and adjacent synovium. Next, the appropriate meniscal rasp is used to prepare the inner and outer surfaces of the tear. Rasping these areas will promote healing.



3

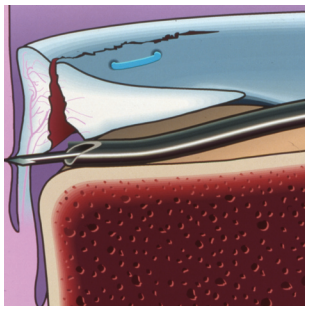
A 2-3cm extra-capsular incision is made just below the joint line. For a medial meniscal tear, the incision is made above the pes anserinus insertion to avoid neurovascular structures. A retractor can also be used throughout this procedure to further protect these structures.



4

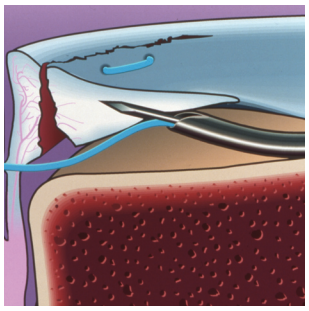
Select the appropriate Zone Specific II cannula based on your left to right perspective. For this posterior medial tear involving a left knee, a left posterior cannula is used through the contralateral portal with the knee at 10° - 15° of flexion. If this were a posterior lateral tear, a right posterior cannula would be used with the knee at 40° - 45° of flexion. Pass a double arm suture, one arm at a time, through the cannula, creating a horizontal "U-shaped" stitch on the superior surface of the meniscus. Tension on this stitch elevates the meniscus exposing its inferior surface for subsequent stitches.

The Zone Specific® II Meniscal Repair System



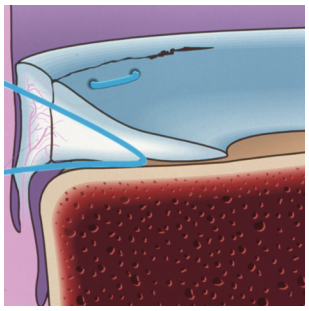
5

Load the cannula with the first arm of the double arm suture, and position the cannula inferior to the meniscal rim. Advance the needle through the capsule and out through the skin incision. The needle will pass easily through the pre-bent cannula. This capsular stitch will help to stabilize the meniscus.



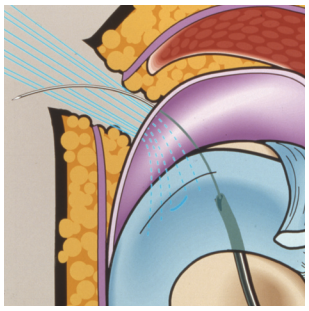
6

Reload the cannula with the second arm of the suture and position the cannula inferior to the meniscus. Advance the needle through the meniscus, tear, capsule, and out through the skin incision. This meniscal stitch will close the tear.



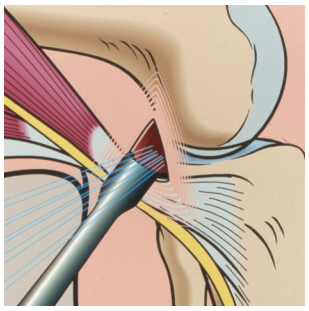
7

Once the first vertical stitch is completed, re-position the cannula, and repeat steps 5 and 6. Continue placing vertical stitches until the tear is completely closed.



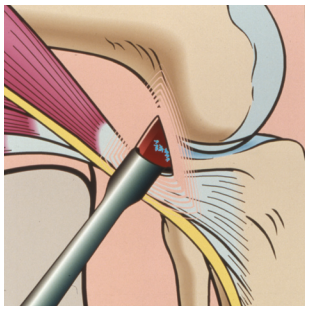
8

As the stainless steel needles exit the pre-bent cannula, they typically retain the curve of the cannula and can be directed away from neuro-vascular structures. Placement of a retractor, as described in figure 3, can enhance protection of these vital structures.



9

With all sutures in place, apply light tension to the suture bundle to ensure stabilization of the repaired meniscus. Pull on individual strands of sutures to identify each suture's corresponding arm.



10

With the leg in 20°- 30° of flexion, tie the paired sutures over the deep fascia. If this were a lateral tear, the knee would be placed at 45°- 55° of flexion. Care should be taken in the case of ACL deficient knees as the joint has a tendency to pivot.

ORDERING INFORMATION

Ref. No.	Description
Zone Specific II Cannulas	
8530	Right Posterior
8531	Left Posterior
8532	Right Anterior
8533	Left Anterior
8539	Right Middle
8540	Left Middle
Zone Specific II Meniscal Rasps	
C8536.1	90° Top and Bottom Serrations
C8537.1	30° Top and Bottom Serrations
C8541.1	30° Bottom Serrations
C8542.1	30° Top Serrations

Ref. No.	Description
Zone Specific II Instrument Tray	
8538	Will accommodate Zone Specific II cannulas and meniscal rasps
Meniscal Repair Needles	
8535	Double Arm Meniscal Repair Needles (stainless steel , 2/0 braided)
8570	Meniscal Repair Needles (Nitinol, with eyelet)

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