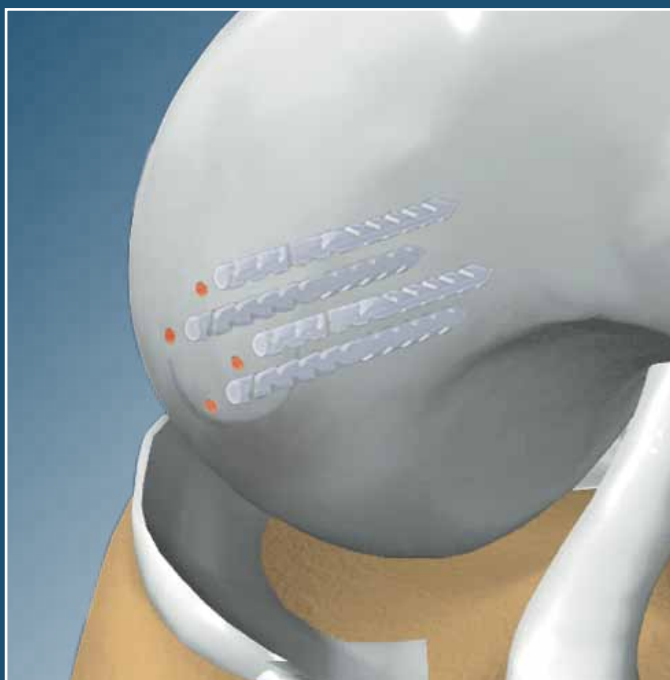




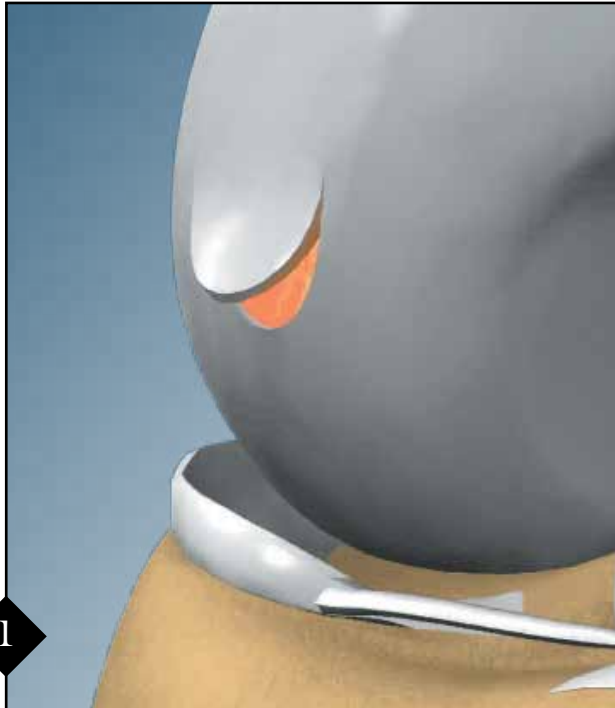
Osteochondral Flap Repair System with Chondral Dart™

Surgical Technique

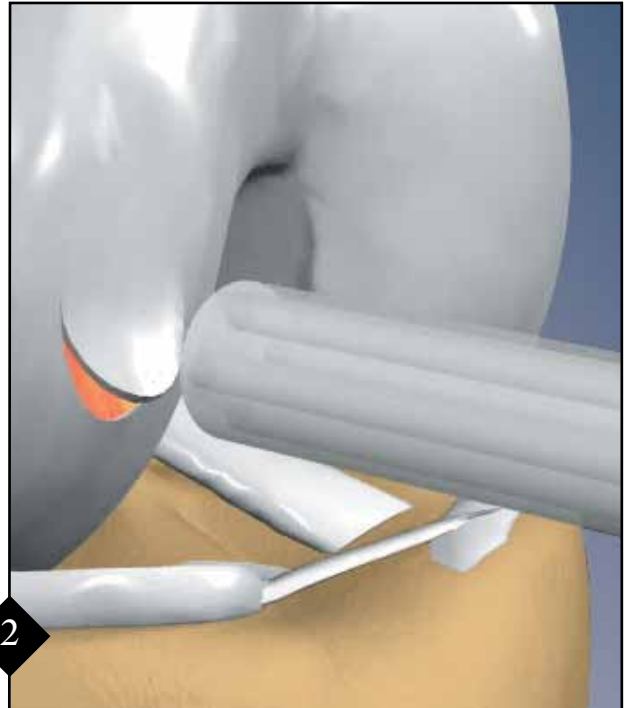


Osteochondral Flap Repair

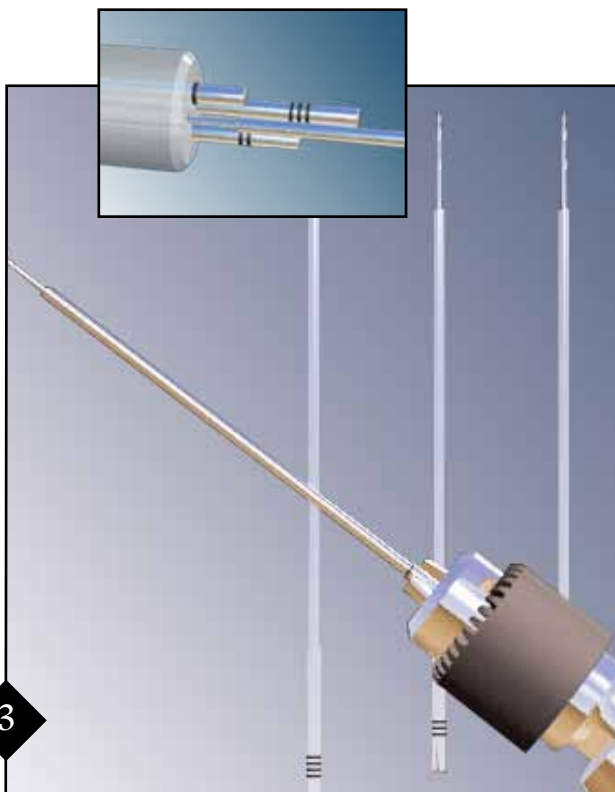
Osteochondral Flap Repair System with Chondral Dart™



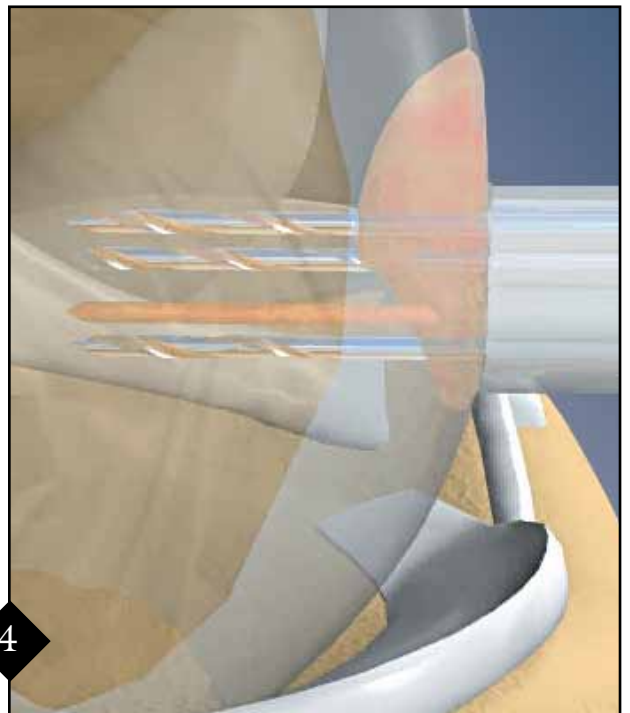
For osteochondral fractures or OCD lesions that are greater than 1 centimeter, the surgeon may select to use the Multi-Shot method for introducing multiple Chondral Darts to secure the flap, while maintaining atraumatic compression of the fragment throughout the procedure.



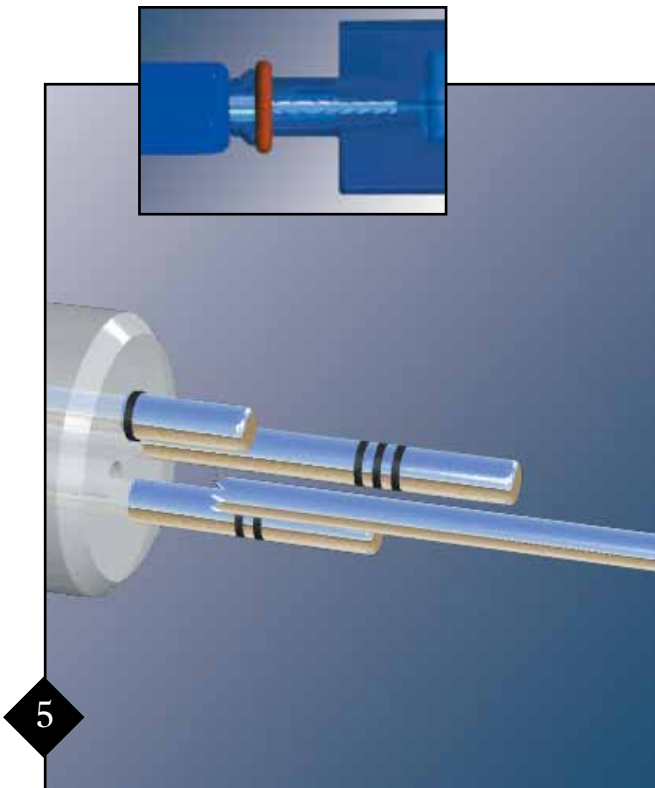
The translucent Osteochondral Flap Repair 4-Hole Guide Sleeve is used to reduce the osteochondral lesion and apply compression during the placement of Chondral Darts. A smaller 2-hole guide sleeve may be favored for smaller lesions.



A series of four stepped Osteochondral Flap Repair Drill Pins are used to create pilot holes within the osteochondral fragment to a depth of 20 mm which later will be replaced with 18 mm long Chondral Darts. Each drill pin is specifically marked and placed into the guide sleeve in sequence.



The combination of the stepped drill pins and the concave translucent guide sleeve achieves maintenance of compression to the fragment while permanent fixation is carried out. Once reduction and temporary fixation is achieved the stepped drill pins are removed one at a time.



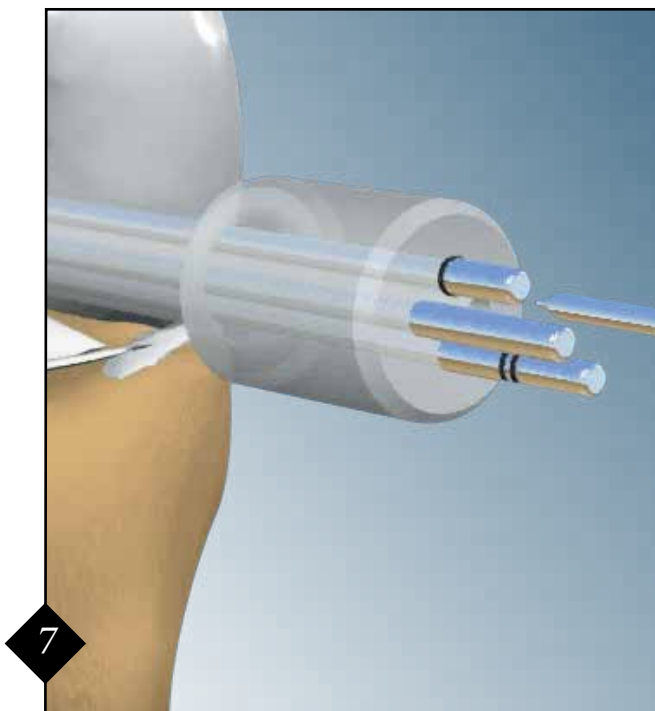
5

The Osteochondral Flap Repair Single Shot Sheath is positioned into the guide sleeve. The depth stop on the sheath avoids contact to the articular hyaline surface. A Chondral Dart 18 mm long and made of semi-crystalline PLLA is loaded into the end of the sheath.



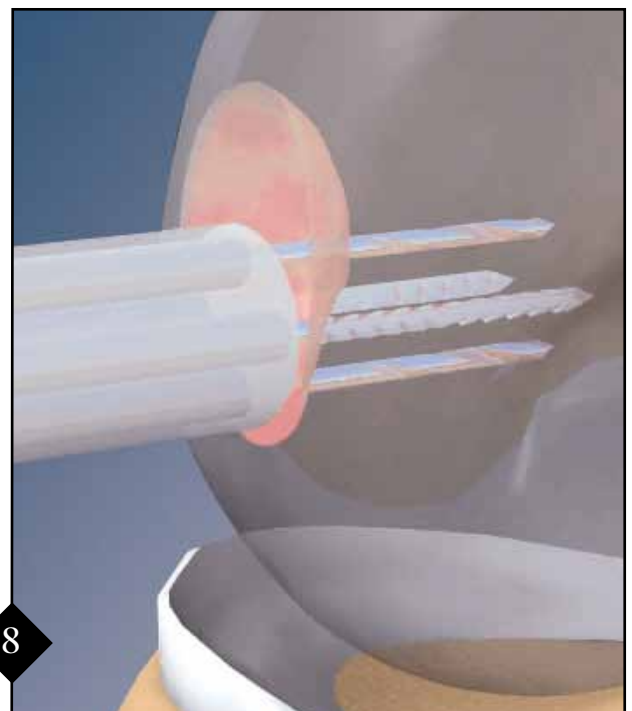
6

Once inserted into the sheath, a Single Shot Dart Inserter is used to deliver the dart into the pilot hole, recessing the Dart 2 mm below the hyaline cartilage surface. With light taps on the inserter, confirmation that the Dart is seated is made when the inserter contacts the back of the sheath.



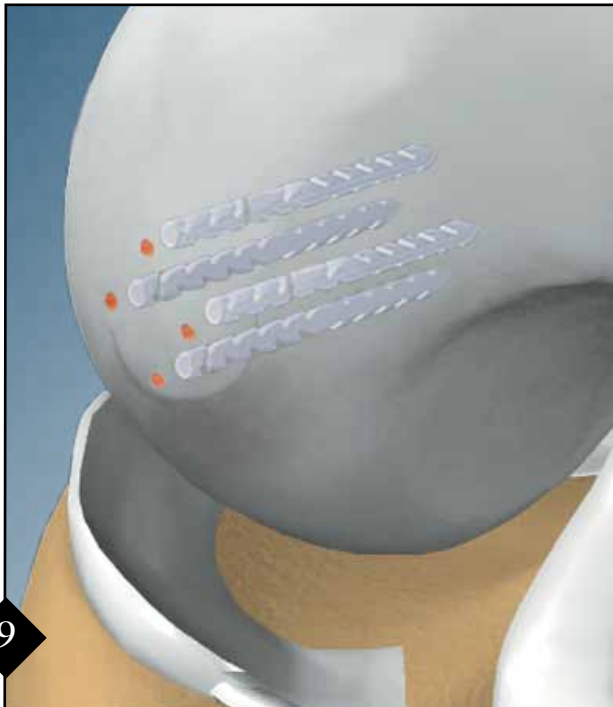
7

At this time the inserter and sheath are removed and replaced with a short Osteochondral Flap Repair Blunt Pin. The pin stabilizes the guide sleeve from moving during subsequent dart insertion by resting behind the countersunk Chondral Dart.



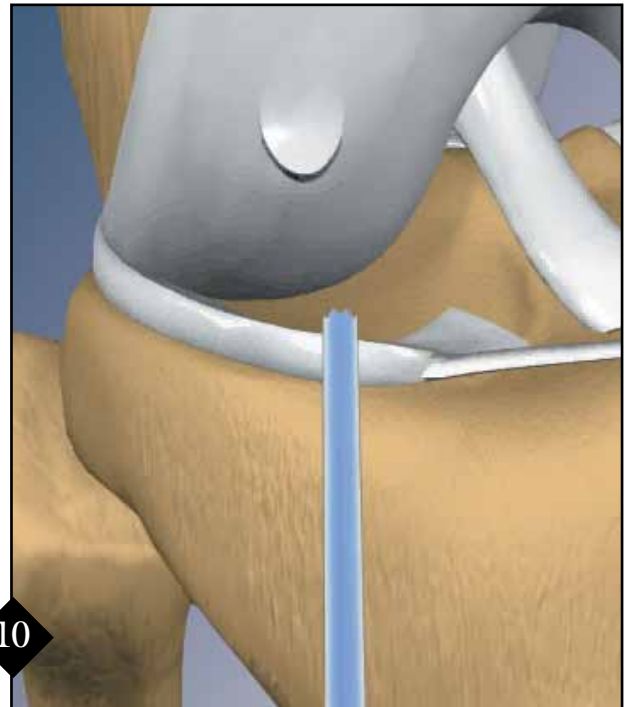
8

A minimum of three Chondral Darts is recommended to secure fragments greater than 1 cm in diameter. Compression is maintained on the osteochondral fragment by the guide sleeve until the necessary number of Darts are placed to successfully reduce and stabilize the lesion.



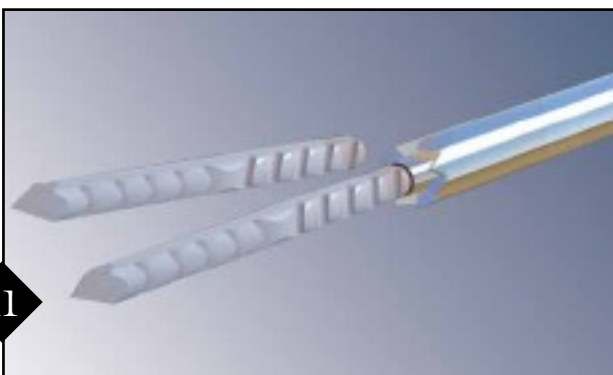
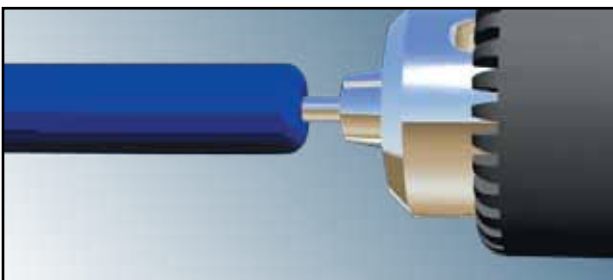
9

The bioabsorbable PLLA Chondral Dart has a unique double reversed barb design to facilitate superior compression and fixation of osteochondral lesions up to 2 centimeters in diameter. The 18 mm long, 1.3 mm diameter Chondral Dart provides secure fixation under the hyaline cartilage surface to eliminate contact with sensitive articulating surfaces.



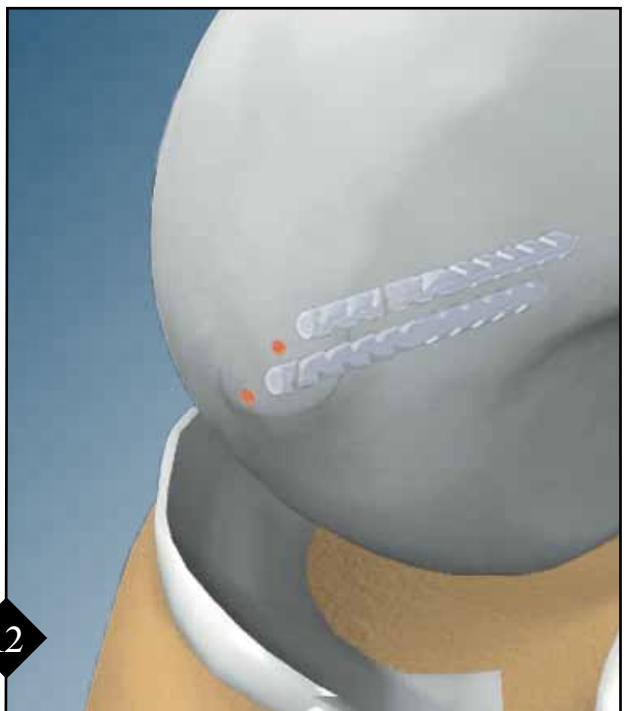
10

For flap tears of 1 cm or less, the surgeon may select the single shot method. The single shot sheath allows for firm reduction and compression of the flap while permanent fixation of the lesion is performed. The sheath is applied to the flap perpendicular to its bone bed to assure secure fixation.



11

A pilot hole is drilled with the Osteochondral Flap Repair Single Shot Trocar through the sheath. The 18 mm Chondral Dart is loaded into the end of the sheath. The inserter is placed into the sheath to deliver the Dart 1-2 mm below the hyaline surface.



12

Minimum placement of two Chondral Darts will successfully apply the appropriate compression and rotational control of the fragment. Postoperative management at the conclusion of either procedure includes passive range of motion exercises and protective weight-bearing for 4-6 weeks.

INSTRUMENTATION:

Osteochondral Flap Repair Single Shot Set (AR-4009S)

sterile, qty. 5, single use, includes:

Osteochondral Flap Repair Single Shot Sheath
Osteochondral Flap Repair Single Shot Dart Inserter
Osteochondral Flap Repair Single Shot Drill
Osteochondral Flap Repair Single Shot Cannula

Osteochondral Flap Repair Multi-Shot Set (AR-4095S)

sterile, single use, includes:

Osteochondral Flap Repair Single Shot Sheath
Osteochondral Flap Repair Single Shot Dart Inserter
Osteochondral Flap Repair Single Shot Drill
Osteochondral Flap Repair Single Shot Cannula
Osteochondral Flap Repair Blunt Pin
Osteochondral Flap Repair 2-Hole Guide Sleeve
Osteochondral Flap Repair 4-Hole Guide Sleeve
Osteochondral Flap Repair Drill Pins, S, M, L & XL

Chondral Dart

18 mm, sterile, qty. 5, single use

AR-4005B-18

Osteochondral Flap Repair Sets are packaged in a convenient, disposable plastic case with an easy tear-off lid.

U.S. PATENT NO. 6,270,503



This description of technique is provided as an educational tool and clinical aid to assist properly licensed medical professionals in the usage of specific Arthrex products. As part of this professional usage, the medical professional must use their professional judgment in making any final determinations in product usage and technique. In doing so, the medical professional should rely on their own training and experience and should conduct a thorough review of pertinent medical literature and the product's Directions For Use.

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