## Pro**Chondrix** <sup>®</sup> CR cryopreserved osteochondral allograft

### **OPERATIVE TECHNIQUE GUIDE** KNEE



## ABOUT

ProChondrix<sup>®</sup> CR is a fresh cryopreserved osteochondral allograft that may be used in a variety of orthopedic reconstructive procedures to aid in repair of articular cartilage lesions. ProChondrix CR provides the live functional cells and other biologic components necessary for the repair of full thickness cartilage lesions throughout the body.<sup>1</sup>

### **OPERATIVE TECHNIQUE** PATELLAR LESIONS

- The patient should be placed supine on the operating table.
- If desired, a standard arthroscopic knee set up is used with a leg holder allowing for a routine knee arthroscopy to be performed prior to the arthrotomy and use of ProChondrix CR.
- Extension can be accomplished by placing the foot onto a sterile Mayo stand.



# PATELLAR LESIONS

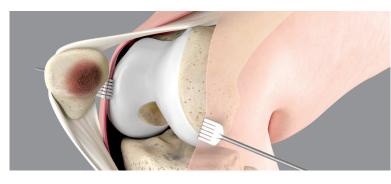
### **STEP 2**

- A parapatellar arthrotomy is performed on the same side as the lesion, large enough to allow for eversion of the patella.
- Exposure is often improved by placing a retractor in the femoral notch. Excision of some of the fat pad can also aid in exposure.

### STEP 3

- The lesion and surrounding cartilage are carefully inspected.
- If necessary, use the sizing instrumentation to determine lesion size and ensure the appropriate sized ProChondrix<sup>®</sup> CR graft is used and the corresponding sized instrument assembly is utilized.

- With the patella everted and securely held, use the ProChondrix Disposable Instrument set that corresponds with the desired size ProChondrix CR graft, excise the chondral defect including all damaged and loose cartilage, taking care to minimize damaging healthy cartilage.
- Place the appropriate size instrument coring tube over the defect.
- Push firmly on the t-handle through the cartilage and twist the instrument in a clockwise and counterclockwise motion, using consistent pressure coring to a depth, NOT TO EXCEED the depth of the cartilage and stopping once the subchondral bone is reached. A mallet may be utilized to tamp the t-handle as needed to aid in coring to the subchondral bone.







- Remove the collar from below the t-handle of the instrument and depress the t-handle to the body of the instrument.
- Twist t-handle in a clockwise motion, using consistent pressure, coring to a depth NOT TO EXCEED the depth of the cartilage and stopping once the subchondral bone is reached to ream out the damaged cartilage.
- Carefully remove the entire system by grasping at the center of the instrument and gently pulling in an upward motion.

# PATELLAR LESIONS

### **STEP 5**

- The defect should be debrided clear of the calcified cartilage to the subchondral bone.
- A curette can then be used to remove remaining remnants of fibrous tissue and cartilage, ensuring the surrounding native articular cartilage maintains healthy, vertical walls.
- If desired, perform bone marrow stimulation per surgeon preference.

### **STEP 6**

- The chondral defect is then prepared for ProChondrix<sup>®</sup> CR application by completely drying the defect.
- Graft fixation should be done using the surgeon's preferred material and technique.
- A thin layer of fibrin sealant such as TISSEEL, should be placed on the subchondral bone before placing the graft.
- Implant the ProChondrix CR graft into the prepared chondral defect with the laser etched side down towards the subchondral bone.
- Ensure the graft does not protrude above the surrounding native articular cartilage surface.
- Fibrin sealant should be placed circumferentially and over top of the graft. Ensure the mixture has sufficiently cured before proceeding.





### STEP 7

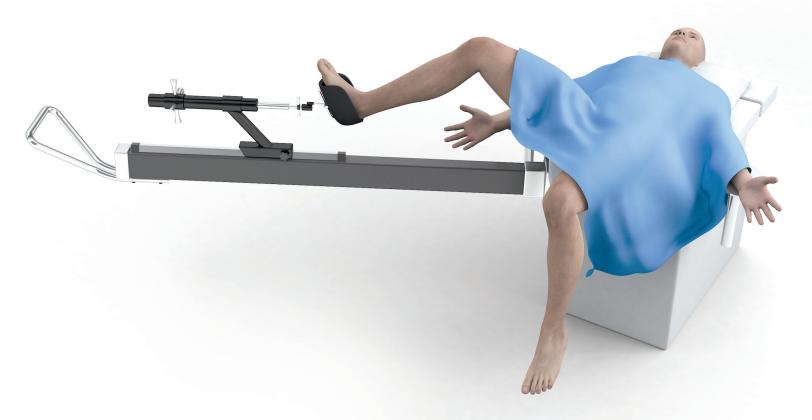
• Wound closure is performed per the surgeon's preference.

### **STEP 8**

• Follow appropriate cartilage therapy post-operative protocols.

### OPERATIVE TECHNIQUE FEMORAL CONDYLE LESIONS

- The patient should be placed supine on the operating table.
- If desired, a standard arthroscopic knee set up is used with a leg holder allowing for a routine knee arthroscopy to be performed prior to the arthrotomy and use of ProChondrix<sup>®</sup> CR.
- The top of the leg holder is put on loosely so that it may be removed and the knee can be brought into deep flexion if necessary to improve access to posterior femoral condyle lesions.



## FEMORAL CONDYLE LESIONS

### STEP 2

- A parapatellar arthrotomy is performed on the same side as the lesion.
- Exposure is often improved by placing a retractor in the femoral notch. Excision of some of the fat pad can also aid in exposure.
- Flexion and extension of the knee can be used to expose lesions that are more posterior or anterior respectively.

### **STEP 3**

- The lesion and surrounding cartilage are carefully inspected.
- If necessary, use the sizing instrumentation to determine lesion size and ensure the appropriate sized ProChondrix<sup>®</sup> CR graft is used and the corresponding sized instrument assembly is utilized.

- Using the ProChondrix Disposable Instrument set that corresponds with the desired size ProChondrix CR graft, excise the chondral defect including all damaged and loose cartilage, taking care to minimize damaging healthy cartilage.
- Place the appropriate size instrument coring tube over the defect.
- Push firmly on the t-handle through the cartilage and twist the instrument in a clockwise and counterclockwise motion, using consistent pressure coring to a depth, NOT TO EXCEED the depth of the cartilage and stopping once the subchondral bone is reached. A mallet may be utilized to tamp the t-handle as needed to aid in coring to the subchondral bone.







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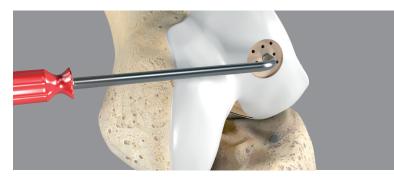
## FEMORAL CONDYLE LESIONS

### STEP 5

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- If desired, perform bone marrow stimulation per surgeon preference.

### **STEP 6**

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#### **STEP 7**

• Wound closure is performed per the surgeon's preference.

#### **STEP 8**

• Follow appropriate cartilage therapy post-operative protocols.

## ORDERING INFORMATION

#### **REFERENCE # DESCRIPTION**

735479010	ProChondrix® CR 9mm
735471110	ProChondrix® CR 11mm
735471310	ProChondrix® CR 13mm
735471510	ProChondrix® CR 15mm
735471710	ProChondrix® CR 17mm
735472010	ProChondrix® CR 20mm
58160-11	ProChondrix <sup>®</sup> CR Disposable Instrumentation - 11mm
58160-13	ProChondrix <sup>®</sup> CR Disposable Instrumentation - 13mm
58160-15	ProChondrix <sup>®</sup> CR Disposable Instrumentation - 15mm
58160-17	ProChondrix <sup>®</sup> CR Disposable Instrumentation - 17mm
58160-20	ProChondrix <sup>®</sup> CR Disposable Instrumentation - 20mm
58161-01	ProChondrix <sup>®</sup> CR Disposable Instrumentation Sizers - 9mm-20mm

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1. Data on file at AlloSource

This operative technique guide was developed with guidance from Dr. Vishal Mehta

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00150-LIT [002] - 01/2022