

Arthroscopic Repair and Augmentation of Massive Rotator Cuff Tears Using the RC Allograft

RC Allograft provides a soft tissue matrix for cellular incorporation and increased initial structural support for massive rotator cuff repairs. An all-arthroscopic approach utilizing standard rotator cuff repair techniques including margin convergence and single or double row of anchors is used to secure existing damaged tendon. Augmentation is achieved with medial sutures and laterally placed PushLock anchors to provide a simplified technique to secure the patch to the underlying rotator cuff tissue and bone with maximum footprint compression.

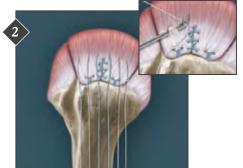
Summarized Procedure by Scott Trenhaile, M.D., Rockford, IL

Patients may be positioned in the Beach Chair Lateral Traction Device or in a lateral decubitus position using the 3-Point Shoulder Distraction System. Upon entering the subacromial space, the rotator cuff tear may be assessed for size, configuration, and mobility.

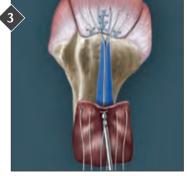
Bone marrow can be aspirated from the proximal humerus through the intraarticular "bare area", using the Bone Marrow Aspirate Kit. The RC Allograft can be hydrated with bone marrow prior to implantation to try and promote healing. Remaining bone marrow can be injected at the repair site after the procedure is complete.



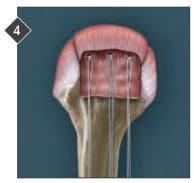
The tuberosity is prepared to a light bleeding surface, margin convergence is performed, and the tendon is attached to bone in a standard fashion. Appropriate releases are usually required in order to achieve repair of the large to massive size tears that require augmentation.



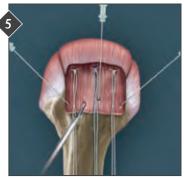
A graduated probe is placed in the subacromial space in order to determine the width and length of the RC Allograft required to cover the repair and tuberosity. Three horizontal mattress sutures are placed medially, just lateral to the myotendinous junction, and equally spaced from posterior to anterior.



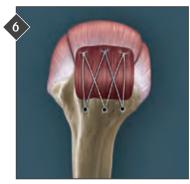
All six suture limbs are brought through a Shoehorn Cannula and passed through the medial portion of the RC Allograft. The central sutures are tied on top of the RC Allograft outside the body using a standard locking slider knot. The RC Allograft is introduced through the cannula and into the subacromial space by advancing the knot pusher on the post suture limb.



The center knot is tied and the remaining medial sutures are retrieved out of their respective anterior and posterior cannulas and tied to complete the medial row



A tissue grasper is used to tension the patch and a series of percutaneous spinal needles are used to provisionally fix the patch to the underlying bone. Positional adjustments should be completed prior to beginning lateral fixation.



Punch three PushLock pilot holes below the lateral edge of the greater tuberosity. One suture each of the anterior and posterior should be implanted with the PushLock into the center hole. Implant the anterior and posterior PushLocks and use these sutures to flatten any wrinkles. Suture tails are cut and spinal needles are removed to complete the repair.