

Rotator Cuff Repair Using PANALOK™ RC Absorbable Anchor

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ROTATOR CUFF REPAIR



Mitek®

PANALOK RC
Anchor

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Surgical Technique for PANALOK RC

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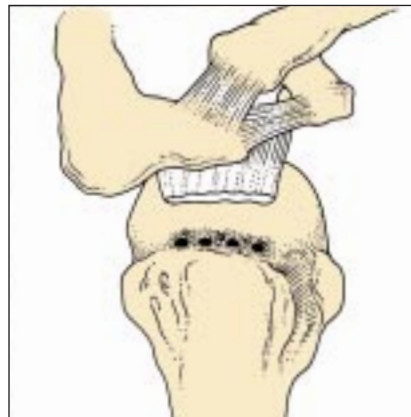
The patient is placed in a semi-sitting (beach chair) position on a standard operating room table. The procedure begins with an examination under anesthesia to rule out instability. If indicated, a diagnostic arthroscopy is performed. The preferred approach is an anterior superior incision within Langer's lines (Fig. 1).



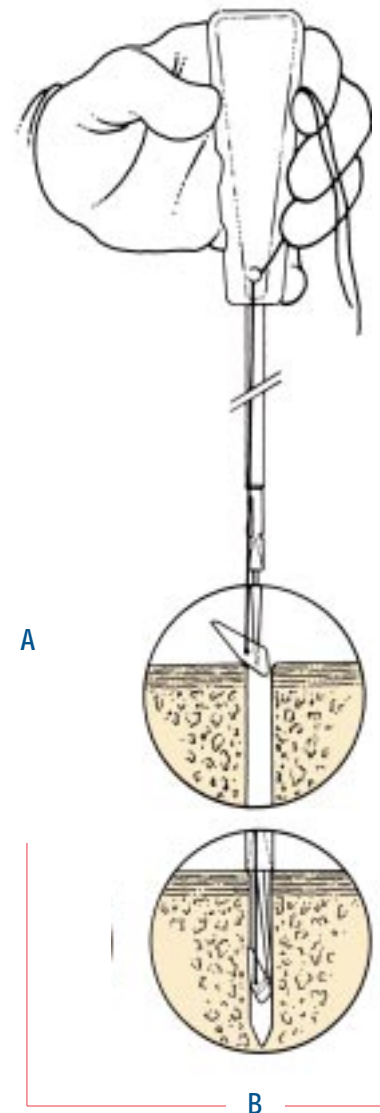
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The approach is usually performed in association with detachment of a small portion of the anterior deltoid from the acromioclavicular joint to the anterior lateral corner of the acromion. An anterior inferior acromioplasty is performed as described by Neer. Mobilization of the cuff tendons requires release of all adhesions and a wide bursectomy. Only tissue that is poor in quality should be removed by debridement of the edges of the rotator cuff tendon.

The PANALOK RC Absorbable Anchor does not require the use of a trough down to bleeding cancellous bone. We do, however, recommend roughening the cortical surface around the drill hole to obtain punctate bleeding and aid in the biologic reattachment of rotator cuff to bone (Fig. 2).



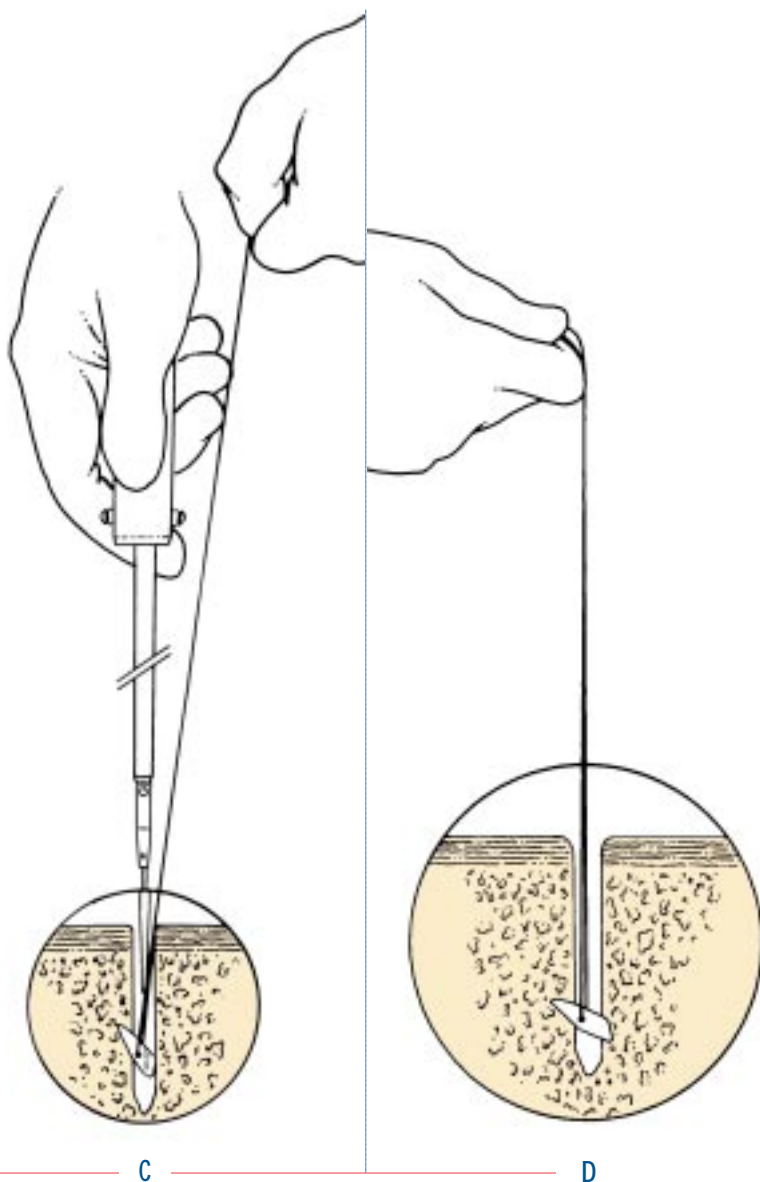
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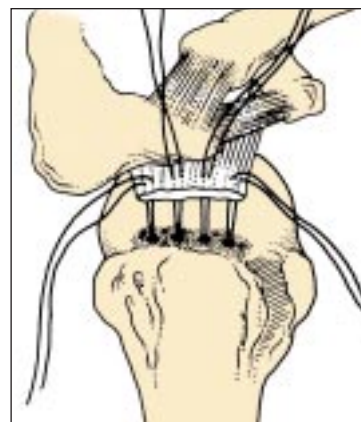
Most patients who undergo primary surgical repair of full-thickness rotator cuff tears have significant improvement in shoulder pain and function. Surgical results depend on surgical technique, the extent of pathologic changes in the rotator cuff, and the postoperative rehabilitation protocol. Surgical factors associated with a less favorable result include inadequate acromioplasty, residual symptomatic acromioclavicular arthritis, inadequate rotator cuff tissue mobilization, and deltoid detachment or denervation.

Improved technology of suture anchors has made the attachment of soft tissue to bone much easier than traditional drill-hole technique. Biomechanical studies show that suture anchors have excellent strength compared to traditional transosseous suture technique. The PANALOK™ RC Absorbable Anchor, the latest in a long line of excellent bone anchors developed by Mitek, provides outstanding pullout strength and has the added advantages of being radiolucent and bioresorbable. Use of this anchor keeps exposure to a minimum by eliminating the need for transtuberosity drilling, thus also reducing morbidity.

Once inserted into the bone hole, the anchors rotate and engage the cancellous bone to fasten subcortically (Figs. 3 a-d).

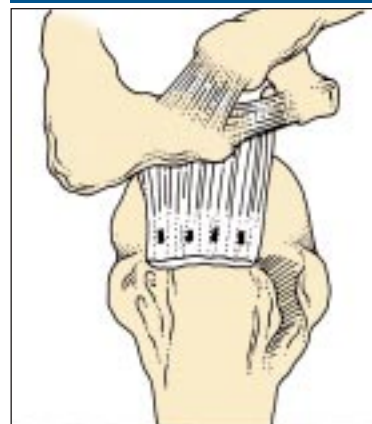


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Each limb of the suture is then passed through the freshened edge of rotator cuff, creating a mattress repair (Fig. 4).

5



The arm is abducted prior to tying the rotator cuff back to bone. When tying, the tendon edge is brought onto the roughened cortical bone adjacent to the drill holes (Fig. 5). The number of sutures and anchors used will depend on the size of the rotator cuff tear. If the deltoid is detached from the acromion, it is extremely important to repair the deltoid back to bone through drill holes.

Passive exercises begin on the day following surgery. Active assisted exercises are generally begun about three weeks postoperatively. Once the anchor has been placed, it should be set by pulling on the suture until excellent fixation occurs.

Occasionally, in very weak osteoporotic cancellous bone, the anchor may not engage. In this instance, reattach the anchor to the inserter tip, then reinsert the anchor in a different alignment. The anchor should provide a firm end point to a reasonable pull on the suture.

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