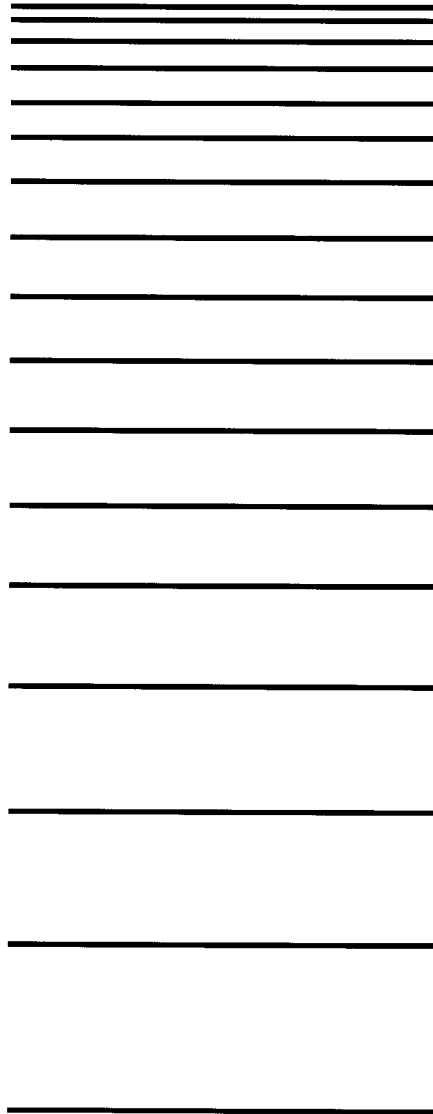


Smith+Nephew

SURGICAL
TECHNIQUE
FOR *SURETAC*[®]



ACUFEX[®]

DYONICS[®]

Introduction

Shoulder stabilization arthroscopically utilizing the Smith & Nephew *Suretac*[®] System has application for shoulder instability particularly of the traumatic anterior type. In principle, the goal is to reattach the capsule ligament complex under sufficient tension to decrease the abnormal shoulder translation while retaining a normal range of motion. Patients with a detached labrum and capsule are preferred. Those with multidirectional instability or poor quality tissue are better repaired by an open technique at this time. A bioabsorbable fixation system has the advantage of obtaining immediate fixation without drilling across the glenoid. In contrast to metal fixation systems the material used in an absorbable technique softens prior to total absorption. Thus, if failure were to occur impingement of the fixation system should not occur.

Operative Technique

In performing arthroscopic stabilization, the lateral decubitus or the beach chair position is utilized. A standard posterior arthroscopic viewing portal is made followed by two working portals anteriorly. The anterior superior portal is placed just lateral and superior to the palpable coracoid process. This is used for inflow as well as instrumentation. A second anterior portal that is just lateral to the coracoid is used for insertion of the *Suretac* implant.

In performing the reattachment, the shoulder is initially examined under anesthesia following which a standard arthroscopic evaluation of the joint is performed. The object is to note the site of the labral detachment, as well as any stretching within the capsule and ligaments. Having ascertained the degree and direction of instability, as well as the type of pathology present, the stabilization technique will begin.

1) Glenoid Attachment Site Preparation

The labrum and capsule may require further detachment initially to allow proximal positioning of the tissue. Dissecting the capsule and labrum off the neck of the glenoid may be required (Fig. 1).

The bone is prepared utilizing an Acufex® Knife Rasp that has a cutting edge to facilitate capsular detachment. A shaver and Burr will complete the preparation of the bone to a depth of 10-15mm from the edge of the glenoid to promote soft tissue healing (Fig. 2).

FIG. 1

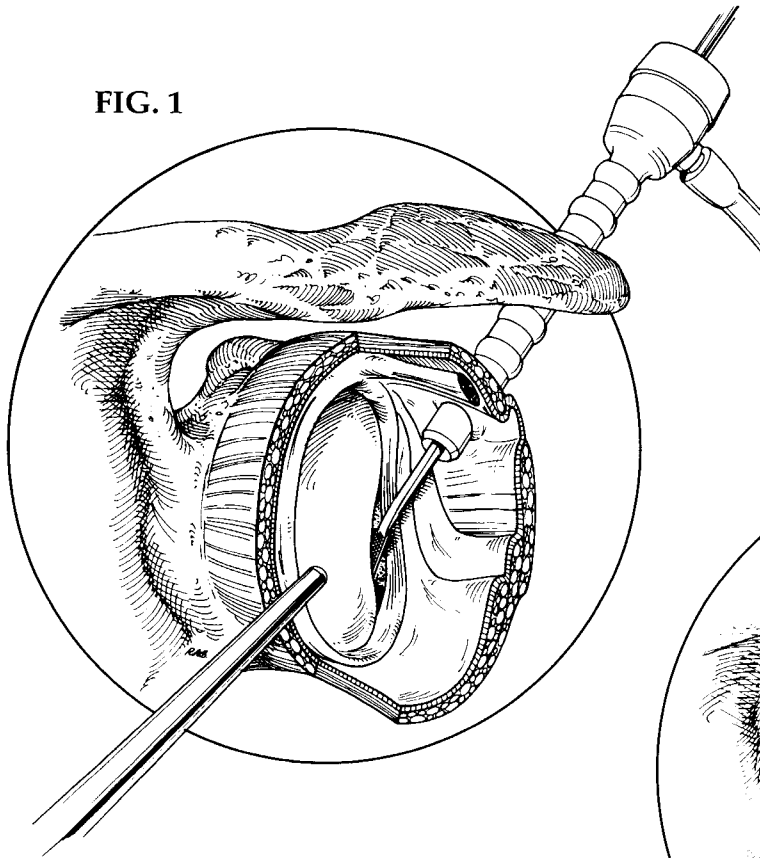
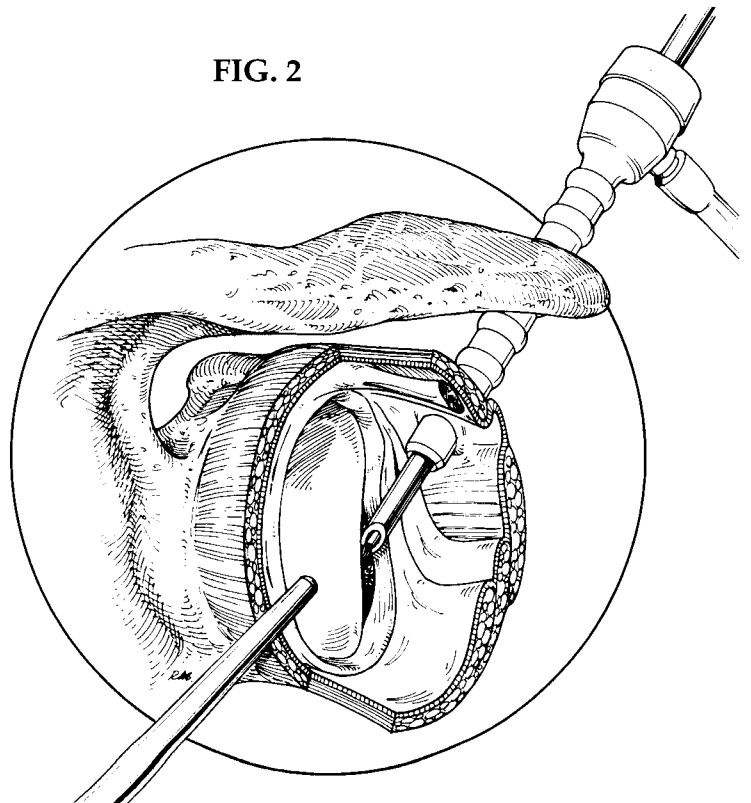


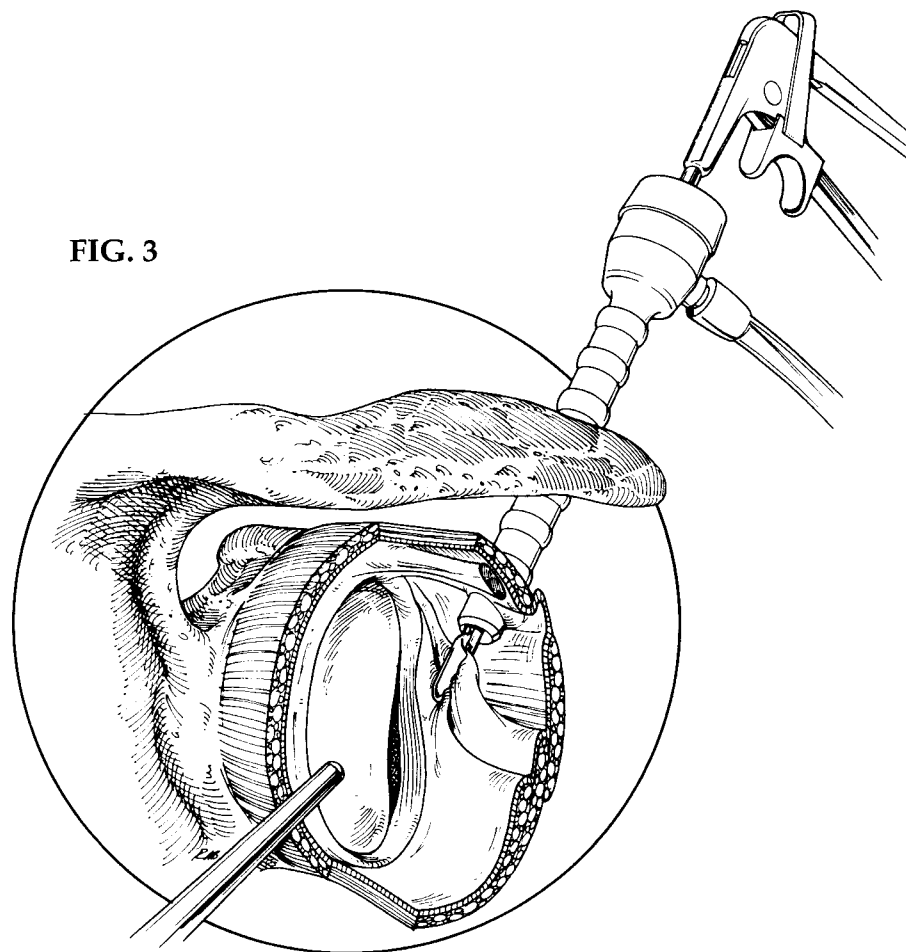
FIG. 2



2) Drill Hole Placement

The Burr can be used to create a depression that will make subsequent drilling easier. There is a tendency for the drill to slide medially or inferiorly. In a right shoulder pilot holes are placed at 3-4 o'clock and at 1-2 o'clock to ease the start for the drill.

The Tissue Tensioner is inserted into a superior portal to grasp the edge of the labrum and inferior ligament advancing it proximally (Fig. 3).



Next, the cannula (7mm) is placed into the joint space proximal to the edge of the subscapularis tendon. The *Suretac*[®] Drill, Guide Wire and Drill Handle are assembled (Fig. 4 and 5), then placed through the cannula and against the capsule or labrum at a point that will place maximum tension on the soft tissue (Fig. 6 and 7).

FIG. 4

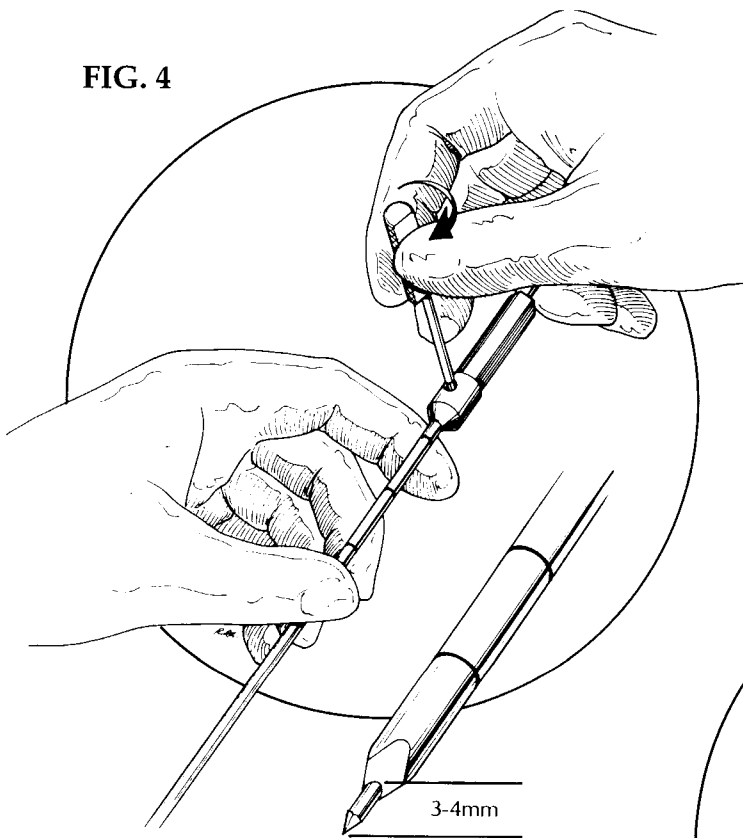
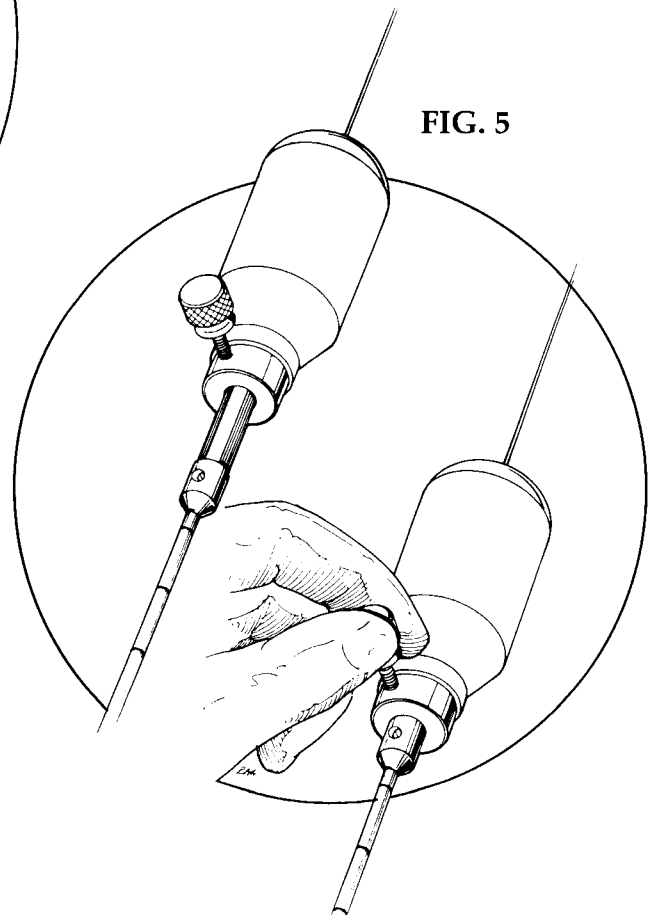


FIG. 5



The Drill and Guide Wire are then advanced, either manually with the Drill Handle or power assisted, into the glenoid at an oblique angle avoiding the articular surface. The Drill is placed in the bone to a depth equal to one length of the *Suretac*® implant (16mm), or one marking on the *Suretac* Drill (Fig. 8). (*It is imperative to use the specifically designed Suretac Drill to create the appropriate depth bone hole*).

FIG. 6

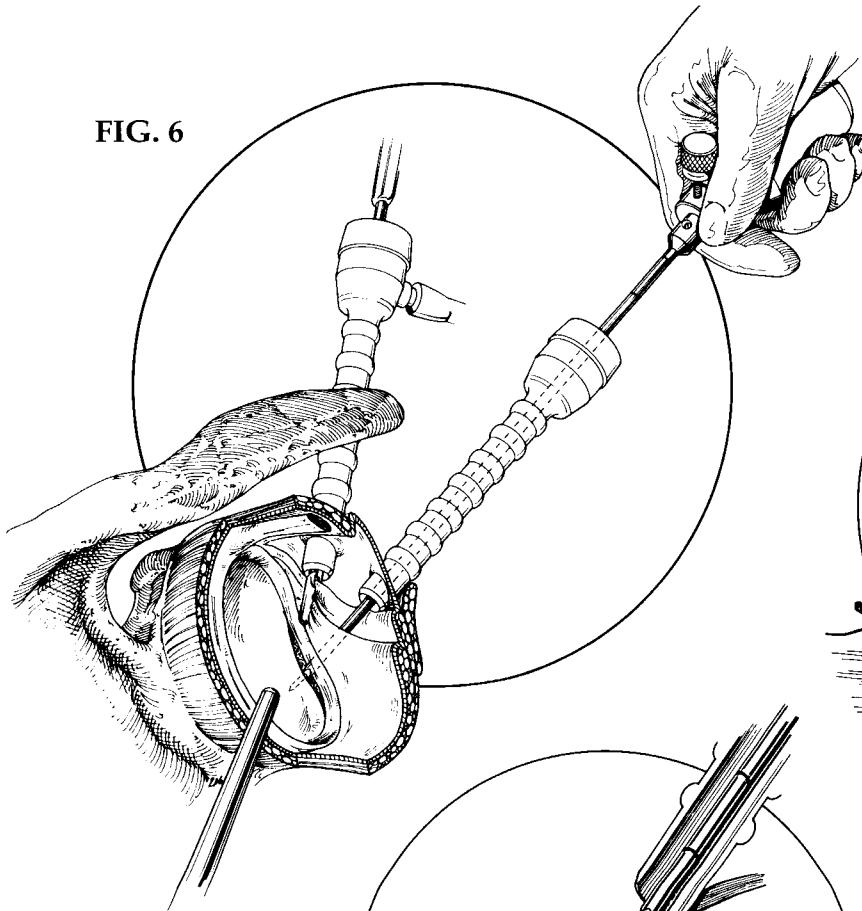


FIG. 8

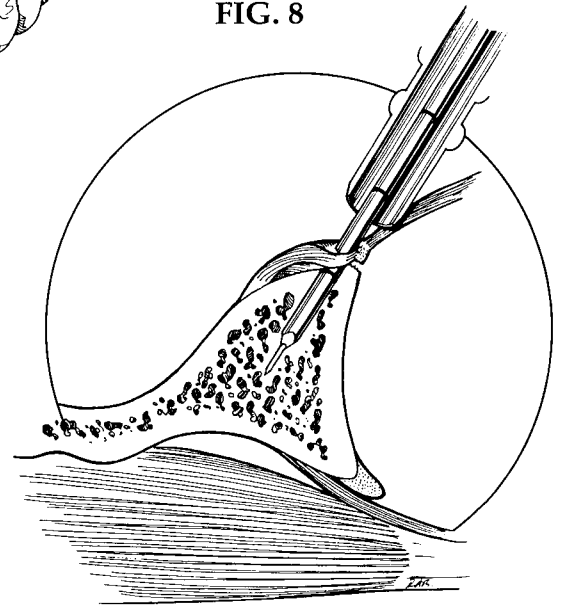
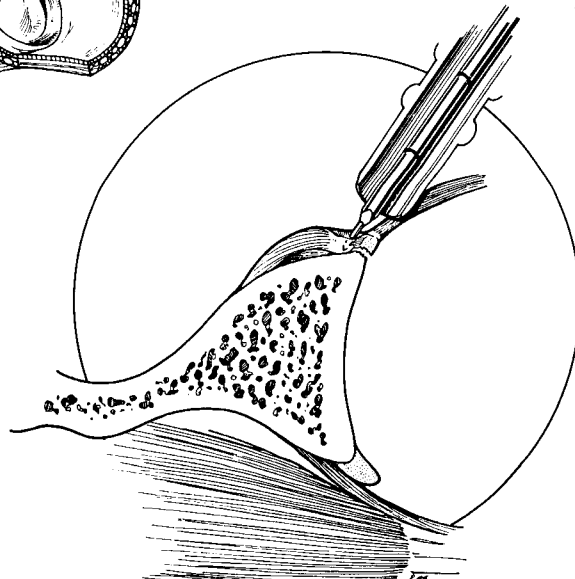


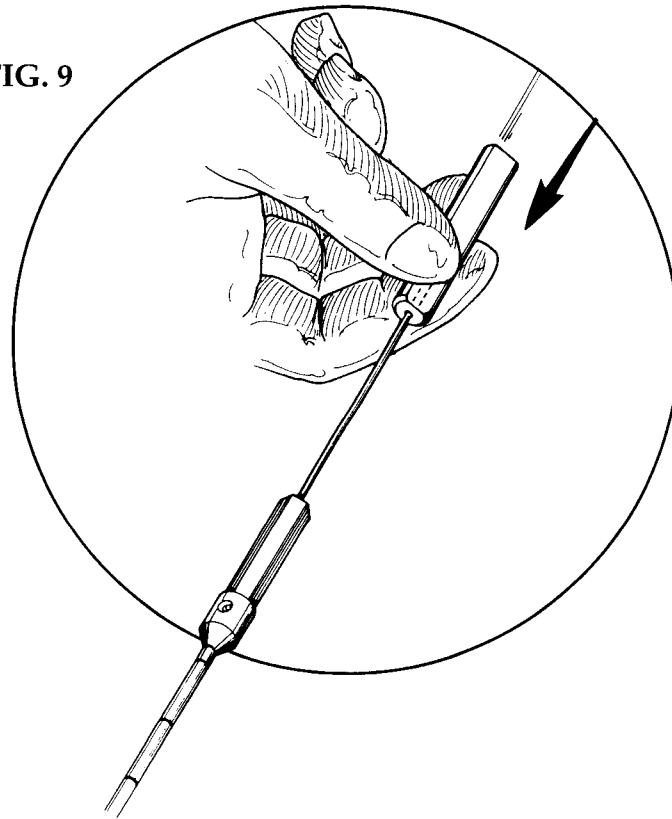
FIG. 7



3a) Suretac Placement

The inferior *Suretac*[®] is placed first. It is important to drill a minimum of one marking on the *Suretac* Drill. After drilling, the set screw on the Drill that locks the Guide Wire is loosened, and using the Guide Wire Handle, the wire is tapped to free it from the Drill prior to Drill removal (Fig. 9).

FIG. 9



After removing the Drill, the *Suretac*® is placed over the Guide Wire and the *Suretac* Driver is used to seat the *Suretac* (Fig. 10). When tapping the *Suretac* into the glenoid, avoid over penetrating the ligament (Fig. 11). The Guide Wire is then removed through the driver to insure easy removal of the Guide Wire. A second *Suretac* is placed more proximally in a similar manner (Fig. 12).

FIG. 10

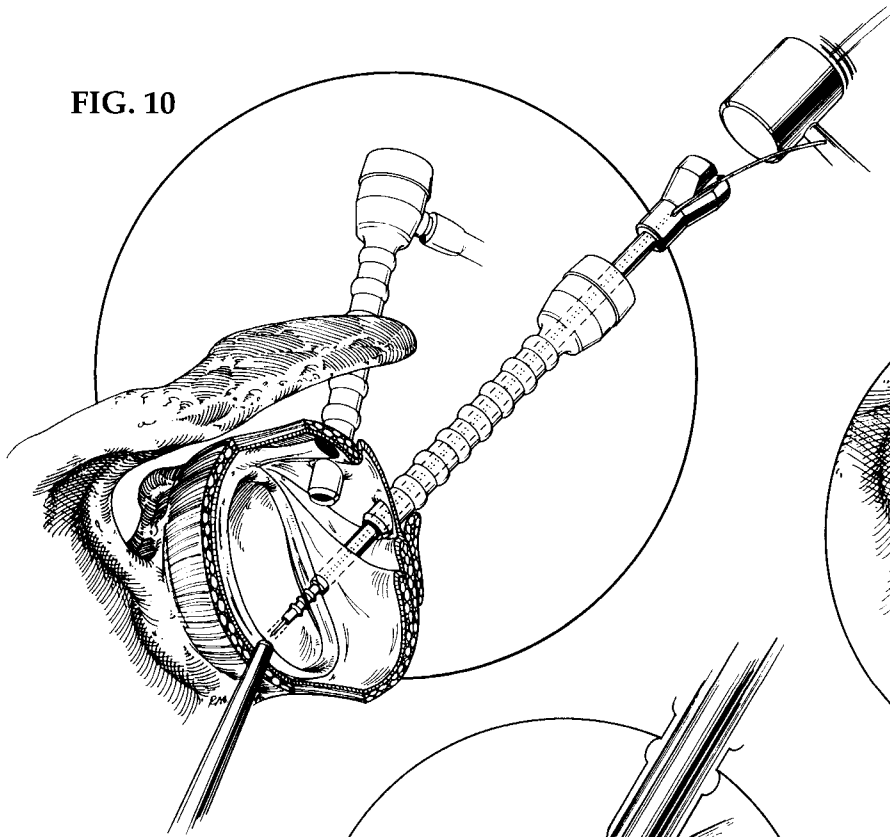


FIG. 11

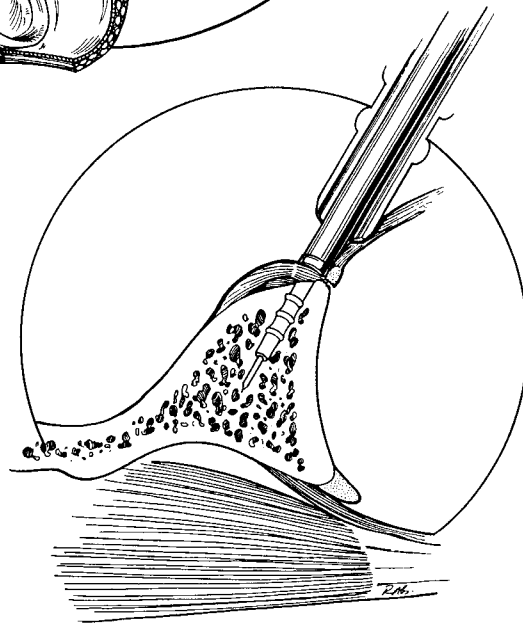
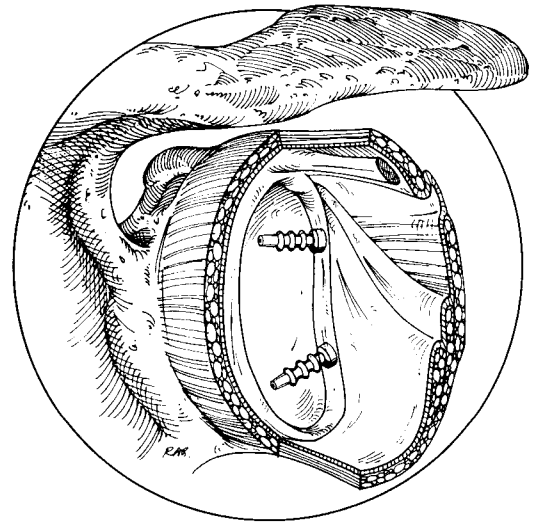


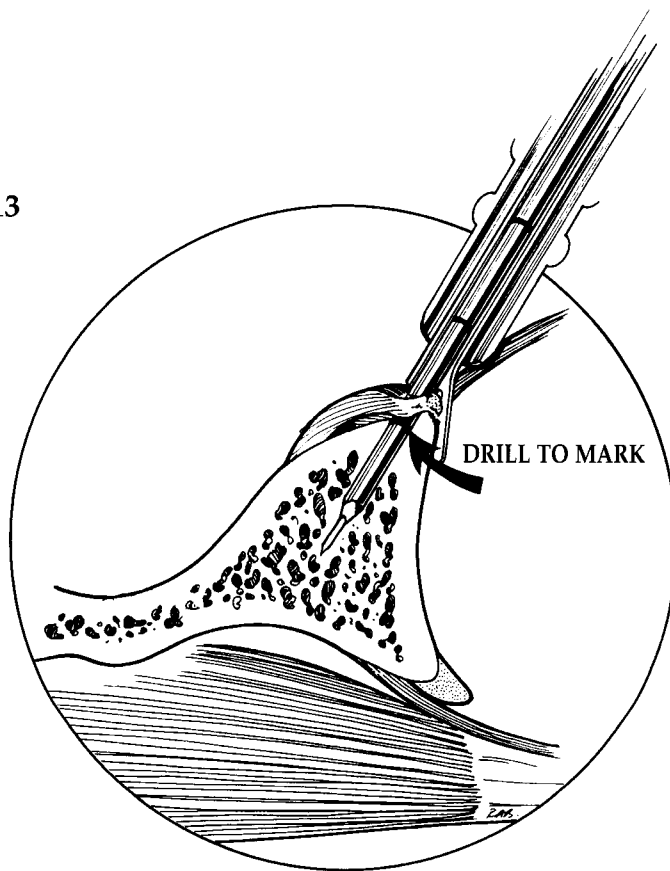
FIG. 12



3b) *Suretac* Placement Assisted by Glenoid Guide

Alternatively, the Acufex[®] Glenoid Guide may be used which will place the *Suretac*[®] Drill at the edge of the glenoid with a pre-measured offset. This device has a projection that will hold the Guide at the edge of the glenoid to prevent the Drill from sliding along the glenoid neck medially or inferiorly. It can be placed through the cannula and on the glenoid neck holding the ligament in position while the Drill is inserted in the glenoid (Fig. 13).

FIG. 13



Following site preparation, pass the Drill and Guide Wire assembly through the guide so that the drill point of the Guide Wire is approximately 3 – 4mm beyond the distal end of the Guide. Lock in place (refer to Fig. 4). The Guide is then placed through the cannula, the capsule is tensioned and the Guide is placed on the glenoid, holding the tissue in place and providing accurate hole placement. Unlock the Drill and Guide Wire assembly from the Glenoid Guide and drill into glenoid. After freeing the Guide Wire from the Drill, relock the Drill to the Glenoid Guide and the Guide may then be used to assist in withdrawing the Drill from the joint. Proceed with *Suretac*[®] placement.

After inserting the *Suretac*, they should be viewed anteriorly to be sure they are holding the tissue properly. At times, a third *Suretac* will be utilized. A probe is used to assess the tension on the ligament. In addition, the position of the humeral head is noted. The tension on the ligament is set with the arm adducted and at neutral to slight external rotation.

Post Operative Regimen

The arm is placed in a sling for 4 weeks with pendulum exercises allowed. At 4 weeks the sling is removed and full range of motion encouraged.

Theraband[®] for exercise is initiated at 4-5 weeks, weights are avoided for about 8-10 weeks. Sports are resumed at approximately 4-5 months if motion and strength have been restored.

Notes:

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