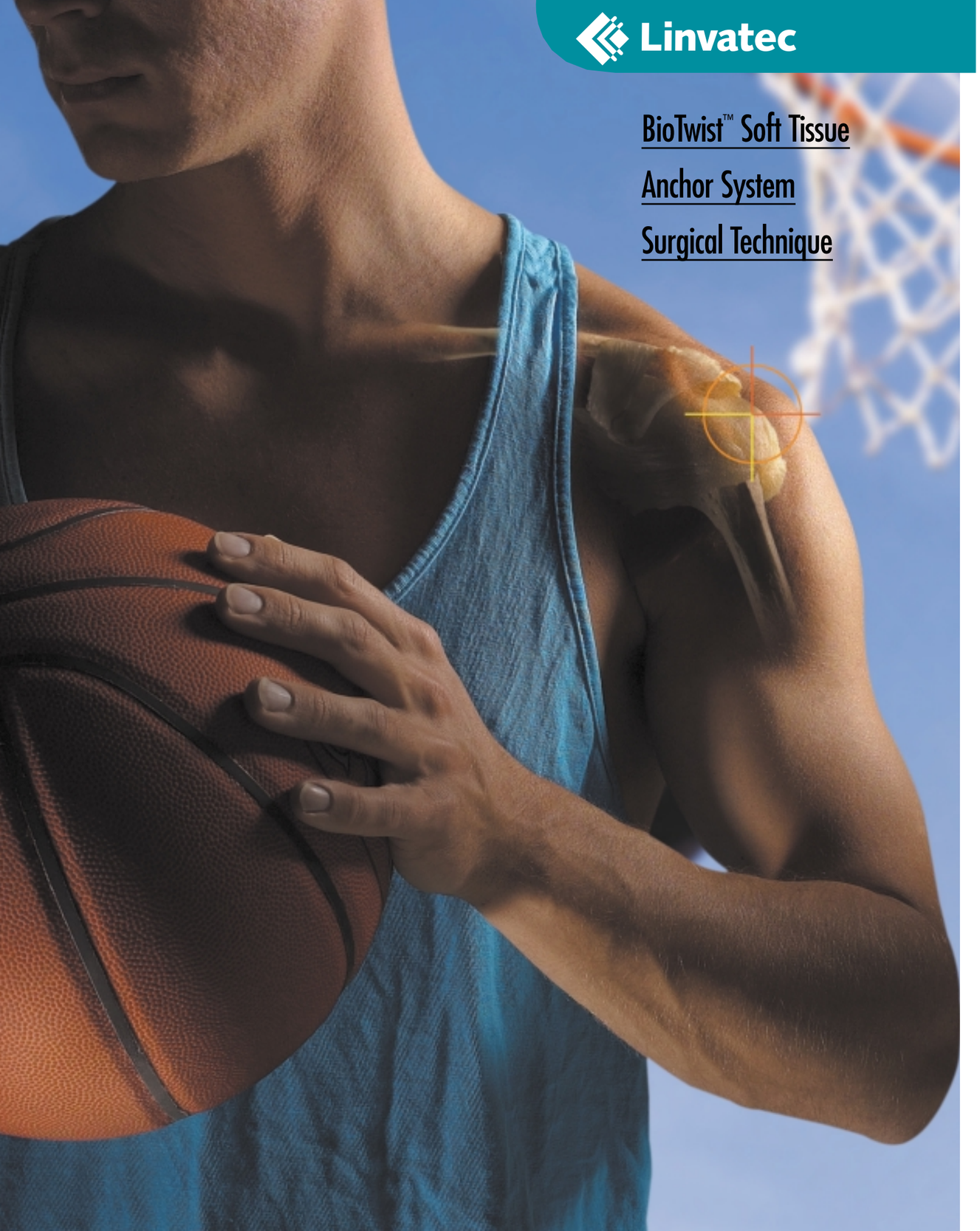
Linvatec

BioTwist™ Soft Tissue Anchor System Surgical Technique



LINVATEC BIOTWIST™ SURGICAL TECHNIQUE

MINI-OPEN ROTATOR CUFF REPAIR

Initially, the affected shoulder is examined under anesthesia for stability and range of motion. Then, an arthroscopic evaluation is performed to determine the size, location, mobility, and severity of the rotator cuff tear.

A subacromial decompression should be performed either open or utilizing the arthroscope.

The procedure is conducted through a mini-open approach.(Figure A.)

TISSUE PREPARATION

The leading edge of the rotator cuff should be debrided to create a healing environment. To ensure adequate tendon to bone healing the greater tuberosity of the humerus is cleared of any soft tissue. The bone is lightly decorticated or a superficial trough is created at the anatomical neck of the humerus, adjacent to the articular cartilage. The rotator cuff is mobilized to assure proper apposition of the tissue to bone.

METHOD 1 –

PILOT HOLE CREATION

Use the 3mm BioTwist Bone Punch to create the desired number of pilot holes. (Figure B.) The Punch is directed to enter the bone in a medial direction below the subchondral bone at approximately a 45-degree angle. The pilot holes are angled away from the center of the trough in a fan-like pattern. Advance the punch to the depth limiting stop.

IMPLANT INSERTION

Utilize the distal tip of the BioTwist inserter to pierce the tissue and engage the pilot hole. (Figure C.) Once the correct alignment is achieved the BioTwist implant is screwed into the bone. Continue to advance the implant (Figure D.) until resistance is met. Final tightening is done using a two-finger technique while observing for dimpling of the rotator cuff (Figure E). Be sure not to over-tighten the implant. Disengage the inserter from the implant by pulling directly back on the inserter.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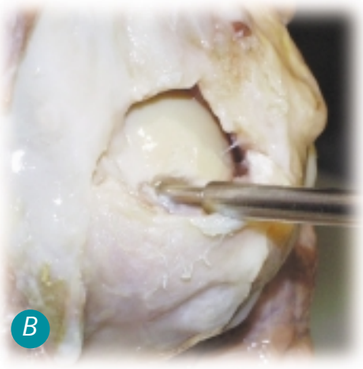
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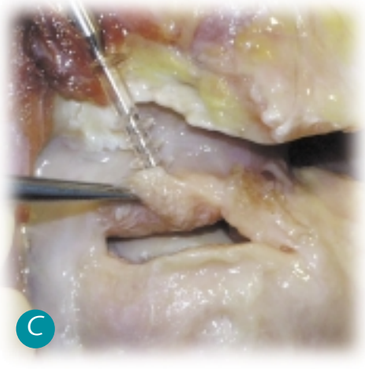
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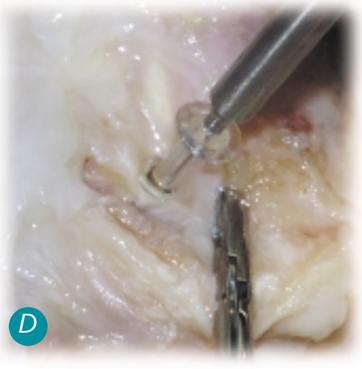
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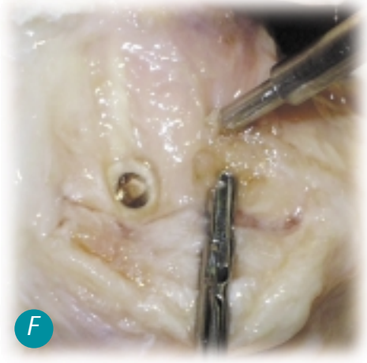
METHOD 2 –

PILOT HOLE CREATION

A traction stitch or an atraumatic grasper can be utilized to mobilize the cuff into the proper position. When the appropriate position is achieved place the BioTwist Punch through the rotator cuff and engage the bone. (Figure F.) The Punch is directed to enter the bone in a medial direction below the subchondral bone at approximately a 45-degree angle. The pilot holes are angled away from the center of the trough in a fan-like pattern. Advance the punch to the depth limiting stop. Remove the Punch while maintaining proper alignment of the rotator cuff and the pilot hole.

IMPLANT INSERTION

Place the tip of the BioTwist inserter into the rotator cuff and then into the pre-punched hole. (Figure G.) Advance the implant until resistance is met. Final tightening is done using a two-finger technique while observing for dimpling of the rotator cuff. (Figure H.) Be sure not to over-tighten the implant. Disengage the inserter from the implant by pulling directly back on the inserter.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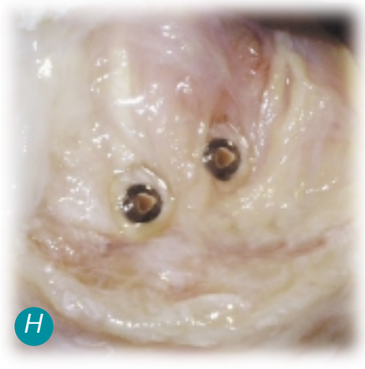
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This technique was developed in conjunction with Dr. Don Johnson, M.D., *Carleton Sports Medicine Clinic*, Ottawa, Canada

PRODUCT INFORMATION

BIOTWIST™ SOFT TISSUE ANCHOR SYSTEM

BioTwist RC Anchor 3.0mm (with disposable driver) . .C6130
BioTwist Bone Punch 3.0mm C6131

Additional Instrumentation

Tissue Retractor Body with Paddles TR1
(with 35mm and 50mm blunt paddle sets)
Tissue Retractor Body TRB1
35mm Paddle Set (Blunt) TRP35
35mm Paddle Set (Aggressive) TRP351
50mm Paddle Set (Blunt) TRP50
50mm Paddle Set (Aggressive) TRP501
75mm Paddle Set (Blunt) TRP75
75mm Paddle Set (Aggressive) TRP751

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