Hand Anatomy

Prior to performing this technique, consult the Instructions for Use documentation provided with individual components – including indications, contraindications, warnings, cautions, and instructions.

Ordering Information
Some of the more common instruments for scapholunate are listed below. Call +1 800 343 5717 in the U.S. or contact your authorized Smith & Nephew representative to order any of the following:

- 72201881 DYNOMITE™ 2.0 PK with one #2-0 ULTRABRAID™ Suture and Needles
- 72201882 SPYROMITE™ 2.0 PK with one #2-0 ULTRABRAID™ Suture and Needles
- 72202019 MINI TAC™ 2.0 Ti with two #2-0 ULTRABRAID™ Suture and Needles
- 72202067 TWINFIX™ 2.8 Ti with two #2-0 ULTRABRAID™ Suture and Needles
- 72202040 Drill Kit: For use with SPYROMITE™ 2.0 and MINI TAC™ 2.0
- 72202082 Drill Kit: For use with DYNOMITE™ 2.0

CAUTION: U.S. Federal law restricts these devices to sale by or on the order of a physician.

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Scapholunate Ligament Repair
Operative Technique of Acute Injuries
A Small Joint Series Technique Guide
As described by Michael G. McNamara, MD
Introduction

The scapholunate ligament—a primary stabilizer of the wrist—leads to the scaphoid and lunate bones. Injury to the scapholunate ligament typically occurs through hyperextension of the wrist. Depending on the severity of the injury to the scapholunate ligament, the patient may experience various symptoms and has numerous treatment options. An acute or partial scapholunate ligament tear causes pain and swelling in the wrist and may be treated with arthroscopic debridement and subsequent pinning for joint stabilization while healing. In more serious injuries, however, the patient may describe pain, swelling, and even a popping or clunking sensation in the wrist. Another common sign of a more serious injury to the scapholunate ligament is diastasis, which can be identified on x-ray.

Operative Technique

Patient Preparation

1. Place the patient in the supine position with the hand on an arm table.
2. Use an axillary block, regional, or general anesthesia.
3. Drapes and prepare the upper arm with a tourniquet and place the fingers in a traction tower.

Technique

1. Perform an arthroscopic examination of the proximal and midcarpal wrist joints to visualize and verify scapholunate dissociation from the radiocarpal and midcarpal portals.
2. Remove the patient’s hand from the tower and place in pronation on the table.
3. Draw a lazy-S or straight line centered over the radial carpal joint (first site) to the Lister’s tubercle, approximately 4 to 6 cm.
4. With a small incision as illustrated, make an incision through the skin to the anatomic insertion site (Figure 1).
5. Release the third compartment and retract the dorsal ICL from distal radial to the anatomic insertion site (Step 3).
6. Elevate the fourth compartment of the dorsal capsule with a small portion of the posterior interosseous nerve transected and removed; split the dorsal capsule obliquely along the edge of the dorsal intercarpal ligament (Figure 2). This pattern, characterized by kineal extension, allows for flexion and rotation subluxation of the scaphoid and lunate joint, which is often accompanied by disassociation between the scaphoid and lunate bones. The effect of this carpal mal-alignment is progressive, degenerative arthritis leading towards scapholunate advanced collapse (SLAC) of the wrist. Because of the late effects of scapholunate ligament injury in acute or sub-acute cases, open repair is often chosen. One technique is described.

Postoperative Protocol

1. Support the patient’s wrist in a well-padded dorsal and volar thumb spica cast.
2. Following surgery, the patient should use elevation, ice, or CyroCuff® on the wrist.
3. At ten days, remove the sutures and fit the patient with a thumb spica cast for two weeks.
4. At four to six weeks, begin gentle therapy-assisted active motion at the radiocarpal joint to help prevent stiffness. The patient should wear a removable clamshell brace for another month to protect against pin breakage.
5. Remove pins at eight weeks and begin active and passive progressive motion.

References