REFERENCES

1. Cobb TK, Beckenbaugh RD. Biaxial long-stemmed multipronged distal components for revision/bone deficit total-wrist arthroplasty. *J Hand Surg Am*. 1996;21(5):764–770.
2. Ward CM, Kuhl T, Adams BD. Five to ten-year outcomes of the Universal total wrist arthroplasty in patients with rheumatoid arthritis. *J Bone Joint Surg Am*. 2011;93(10):914–919.
3. Ferreres A, Lluch A, Del Valle M. Universal total wrist arthroplasty: midterm follow-up study. *J Hand Surg Am*. 2011;36(6):967–973.
4. Harlingen Dv, Heesterbeek PJ, J de Vos M. High rate of complications and radiographic loosening of the biaxial total wrist arthroplasty in rheumatoid arthritis: 32 wrists followed for 6 (5–8) years. *Acta Orthop*. 2011;82(6):721–726.
5. Rettig ME, Beckenbaugh RD. Revision total wrist arthroplasty. *J Hand Surg Am*. 1993;18(5):798–804.

An Easy and Applicable Method for Stripping and Smoothing the Tendon Ends: Sterile Wooden Tongue Depressor

To the Editor:

During primary tendon repairs and tendon transfer operations, tendon ends have to be smooth and tidy to achieve optimum tendon healing. Although minimal handling is imperative, holding the tendon and trimming the ends are difficult because the epitenon and synovial fluid makes the tendon slippery. Multiple efforts to tidy the ends can cause further shortening and cause increased tension in the repair zone, which can lead to tendon repair rupture.[1] Tendon ends are also exposed to blunt trauma from being held with forceps in the course of these prolonged efforts, and the epidentinous injury can be associated with peritendinous adhesion formation.[2,3]

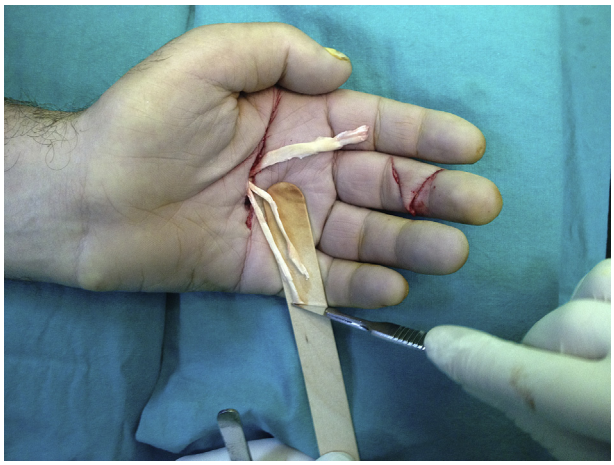

FIGURE 1: Stripping and smoothing the tendon ends over a sterile wooden tongue deppressor during a flexor digitorum superficialis 4-tail procedure for correcting a claw hand deformity.

To strip and smooth the tendon ends, we use an ethylene oxide–sterilized wooden tongue depressor. We lay the tendon ends on the tongue depressor to stabilize them, and can then easily cut the ends or strip along the tendon with a scalpel (Fig. 1). We prefer a dry wooden tongue depressor, and the scalpel direction proceeds with no deviation. We have not observed complications as the result of using a tongue depressor. We confidently recommend this technique to our collegues as an effective, safe, cheap, and easily available method of smoothing and stripping the tendon ends.

Hakan Bulam, MD
Onur Öztürk, MD
Erkin Ünlü, MD
Department of Plastic Reconstructive and Aesthetic Surgery
Ankara Numune Training and Research Hospital
Ankara, Turkey

http://dx.doi.org/10.1016/j.jhsa.2013.12.018

REFERENCES

1. Wu YF, Tang JB. Effects of tension across the tendon repair site on tendon gap and ultimate strength. *J Hand Surg Am*. 2012;37(5):906–912.
2. Seiler JG III. Flexor tendon injury: acute injury. In: Wolfe SW, ed. *Green's Operative Hand Surgery*. 6th ed. Philadelphia, PA: Elsevier; 2011:199–200.
3. Dy CJ, Hernandez-Soria A, Ma Y, Roberts TR, Daluiski A. Complications after flexor tendon repair: a systematic review and meta-analysis. *J Hand Surg Am*. 2012;37(3):543–551.

Posterior Interosseus Nerve Entrapment Following Monteggia Fracture Dislocation

To the Editor:

We recently treated a 27-year-old woman who sustained a closed left Bado type 1 Monteggia fracture-dislocation during a fall. In the emergency department, the patient was noted to have a posterior interosseous nerve (PIN) palsy before and after closed

reduction and splinting. Operative intervention was undertaken. We initially stabilized the ulna near-anatomically with compression plate fixation. Intraoperative fluoroscopy demonstrated reduction of the radiocapitellar joint in the neutral and supinated forearm positions, but anterior subluxation was evident in pronation (Fig. 1). Subtle proximal radioulnar joint widening was also noted on anterior-posterior imaging. Lateral exposure between the extensor carpi radialis brevis and extensor digitorum communis revealed an annular ligament tear and an entrapped PIN posterior to the radial neck. To free the PIN, we removed the ulna fixation, dislocated the radiocapitellar joint, and restored the PIN to its native anterior position using a Freer elevator. The ulna fixation was revised, and fluoroscopy demonstrated a stable radiocapitellar joint throughout forearm rotation.

There are few reports of this finding, primarily in the pediatric literature. Ruchelsman et al[1] described the case of an 8-year-old boy who sustained a Bado type 1 Monteggia fracture-dislocation and subsequently developed a PIN palsy. Nine months later, at surgery, the PIN was noted to be subluxed posterior to the radial head and located in the proximal radioulnar joint. Morris[2] reported the case of a 17-year-old girl who similarly sustained a Bado type 1 Monteggia fracture-dislocation. Through a Boyd approach, Morris noted that the PIN had subluxed posteriorly. Li et al[3] reported 8 pediatric Monteggia fracture-dislocations presenting with PIN palsies. Four of 5 Bado type 3 fractures were associated with PIN subluxation into the radiocapitellar joint. They recommended immediate surgical exploration in all Bado type 3 pediatric Monteggia fracture-dislocations with a PIN palsy and an irreducible radial head. Cho

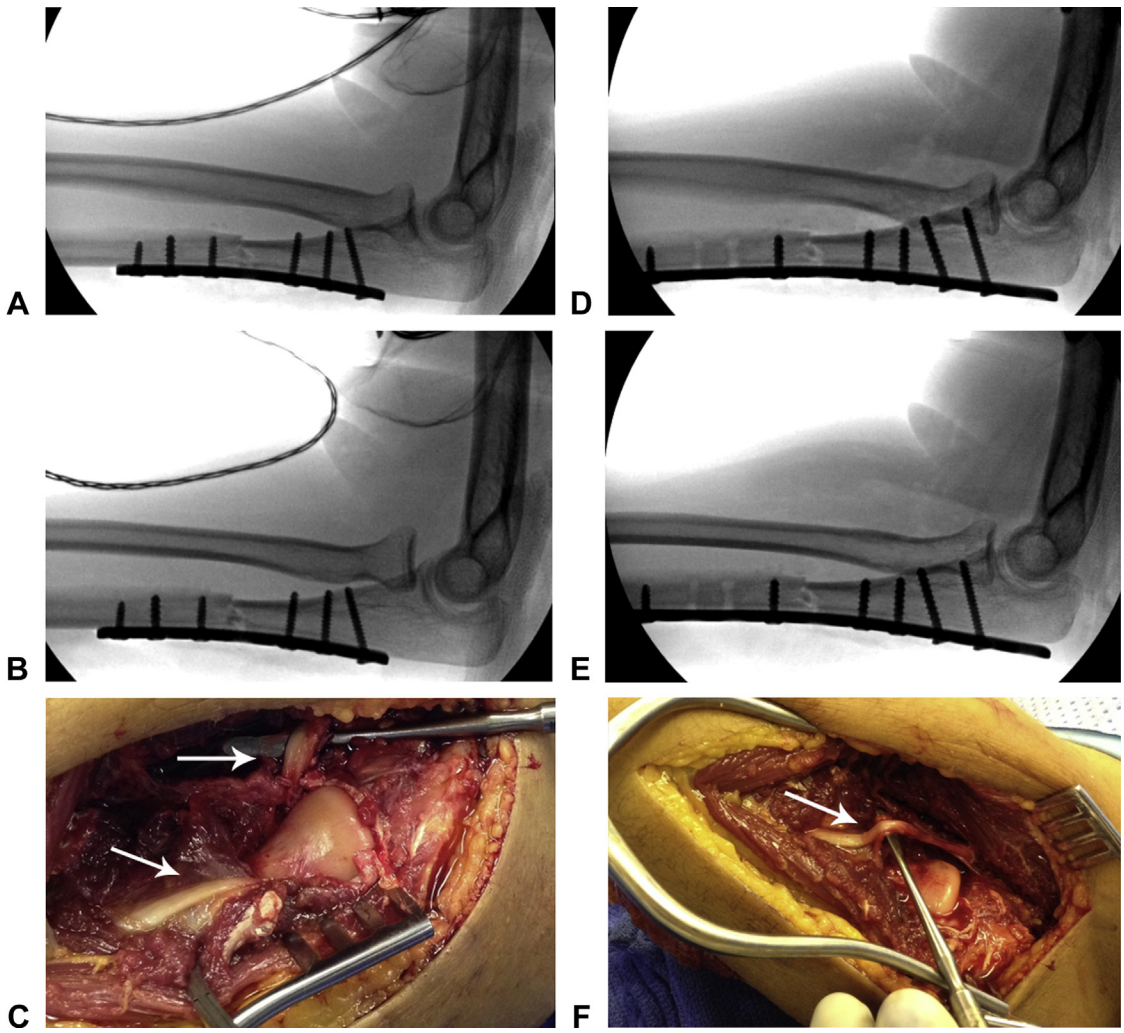

FIGURE 1: **A** Radiocapitellar joint reduced in neutral forearm rotation and **B** subluxed in pronation. **C** Intraoperative photograph of the PIN entrapped posterior to the radial neck. **D, E** Reduction of the radiocapitellar joint in both neutral and pronation. **F** Intraoperative photograph demonstrating reduction of the PIN to its native position. White arrows indicate the PIN.

et al[4] described the case of a 46-year-old woman who had sustained an elbow injury when she was 6 years of age and now had a tardy PIN palsy. At surgery, the PIN was wrapped around the medial side of the radial neck and stretched by the supinator.

This case highlights several points regarding treatment of Monteggia fracture-dislocations. First, a preoperative PIN palsy should alert to the surgeon to this possibility of nerve subluxation. Second, a cross-table fluoroscopic examination with the forearm in supination, neutral, and pronation should be performed. In this case, radiocapitellar subluxation was notable only in pronation. Therefore, it is important that fluoroscopic radiocapitellar reduction be confirmed throughout forearm range of motion. Finally, an entrapped PIN under tension can appear similar to the annular ligament and capsule, so there should be a low threshold for exposing the PIN (distal to proximal) within the supinator.

Jonathan M. Hagedorn, MD
Lee M. Reichel, MD
Department of Orthopedic Surgery
Baylor College of Medicine
Ben Taub General Hospital
Houston, TX

http://dx.doi.org/10.1016/j.jhsa.2013.12.019

REFERENCES

1. Ruchelsman DE, Pasqualetto M, Price AE, Grossman JA. Persistent posterior interosseous nerve palsy associated with a chronic type 1 Monteggia fracture-dislocation in a child: a case report and review of the literature. *Hand*. 2009;4(2):167–172.
2. Morris A. Irreducible Monteggia lesion with radial-nerve entrapment: a case report. *J Bone Joint Surg Am*. 1974;56(8):1744–1746.
3. Li H, Cai Q, Shen P, Chen T, Zhang Z, Zhao L. Posterior interosseous nerve entrapment after Monteggia fracture-dislocation in children. *Chin J Traumatol*. 2013;16(3):131–135.
4. Cho C, Lee K, Min B. Tardy posterior interosseous nerve palsy resulting from residual dislocation of the radial head in a Monteggia fracture: a case report. *J Med Case Rep*. 2009;3:9300.

Inconsistent Acronym Use

To the Editor:

I was distressed upon reading an article in the September 2013 issue[1] in which the authors reported on the interobserver reliability of diagnosing a scapholunate dissociation. Unfortunately, the acronym SLD was used to define both *scapholunate dissociation* and *scapholunate ligament disruption*.

This is a problem for 2 reasons. First, it implies that the terms *dissociation* and *disruption* are synonymous. In my practice, I do not use these words interchangeably. I think of disruption as the actual state of ligament rupture (whether observed or not) and dissociation as the radiographic finding of a widened scapholunate interosseous space. Even if my understanding and use of these terms is incorrect, it is standard in all forms of English literature to define an acronym early in the text—as the authors did—and then to use it consistently. Second, by using the acronym SLD to define two separate phrases, it is not clear if the L stands for *ligament* or *lunate*.

I realize that this article resulted from an international collaboration and there might have been a translation problem. I do not speak German and perhaps there is only 1 word in that language to describe both dissociation and disruption.

For this reader, the inconsistent use of the acronym brought into question any subsequent details within the paper and made it impossible for me to benefit from what I am sure represents the hard work and insightful analysis of these esteemed researchers. I suspect that an error such as this one would have precluded another article from publication in many respected journals, magazines, and newspapers. I believe that we should hold ourselves to the highest literary standards.

Thomas McDonald, MD
Sonora Regional Medical Center
Sonora, CA 95370

http://dx.doi.org/10.1016/j.jhsa.2013.11.032

REFERENCE

1. Gradl G, Neuhaus V, Fuchsberger T, Guitton TG, Prommersberger K, Ring D, Science of Variation Group. Radiographic diagnosis of scapholunate dissociation among intra-articular fractures of the distal radius: interobserver reliability. *J Hand Surg Am*. 2013;38(9):1685–1690.

In Reply:

We agree with you, and I am sure the reviewers and editor agree as well. Not only is language an issue, but also experience and training. There were many drafts edited to try to get the terminology accurate and consistent, but your careful eye found a persistent inconsistency. To clarify, the reliability data relate to diagnosis of scapholunate dissociation on radiographs, and the accuracy data relate to the diagnosis of scapholunate ligament disruption diagnosed according to the described reference standard.

David Ring, MD
Chief of Hand Surgery
Massachusetts General Hospital
Boston, MA

http://dx.doi.org/10.1016/j.jhsa.2013.11.034