

## Periprosthetic Proximal Fracture in Total Wrist Arthroplasty

### To the Editor:

A periprosthetic fracture in total wrist arthroplasty (TWA) is rare. The literature documents 1 case in 1996<sup>1</sup> after revision of the distal component of a TWA for bone loosening.

A 54-year-old, right-handed man fell on the right wrist, causing forced hyperextension. He had undergone right TWA (Universal Total Wrist; KMI, San Diego, CA) 9 years previously for rheumatoid arthritis. Radiographs showed periprosthetic fracture at the tip of the radial component. Computed tomography showed no signs of subsidence or loosening of radial component (Fig. 1). Fracture reduction and internal fixation were achieved with the assistance of fluoroscopic guidance. A locking compression plate using 4 distal unicortical screws and 5 proximal bicortical screws secured fixation. The fracture site was grafted by autologous cancellous bone from the patient's olecranon. At the 12-month follow-up, the patient had recovered painless range of motion. X-rays showed bone healing and good alignment without signs of loosening.

Total wrist arthroplasty is associated with complications such as joint imbalance, dislocations, and loosening of the components.<sup>1-4</sup> Although fixation of the proximal component usually has not been a problem because the implant rests against cortical

bone,<sup>3</sup> with a periprosthetic fracture, it is paramount to assess the stability of the proximal component in the radius.<sup>5</sup> For treatment, we considered the fracture pattern, the computed tomography scan findings, and the implant's stability intraoperatively. In our case, open reduction and internal fixation of a radius periprosthetic fracture in TWA with a well-integrated implant was successful.

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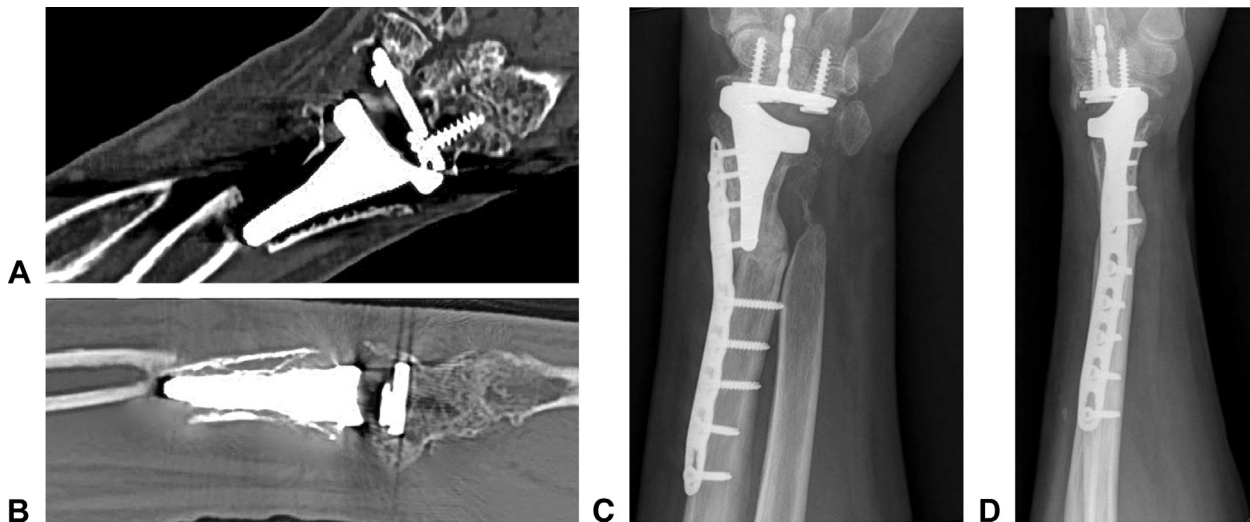
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**FIGURE 1:** **A** Coronal and **B** sagittal computed tomography scan images of the wrist demonstrating a proximal fracture in the tip of the radial component. **C** Anteroposterior and **D** lateral radiographs of the wrist showing evidences of bone-healing fracture.

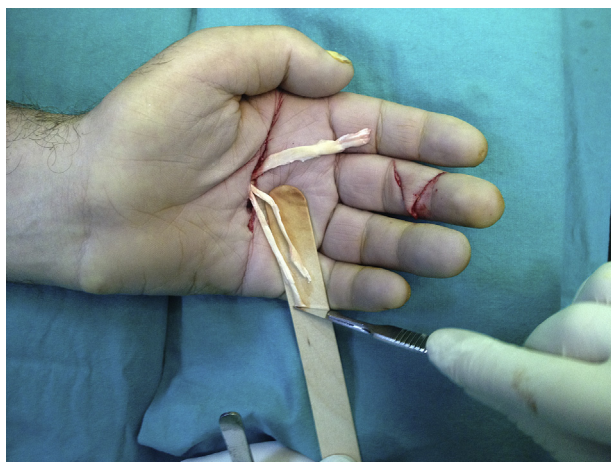
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## An Easy and Applicable Method for Stripping and Smoothing the Tendon Ends: Sterile Wooden Tongue Depressor

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 epitendon 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.<sup>1</sup> Tendon ends are also exposed to blunt trauma from being held with forceps in the course of these prolonged efforts, and



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

the epididymous injury can be associated with peritendinous adhesion formation.<sup>2,3</sup>

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 colleagues as an effective, safe, cheap, and easily available method of smoothing and stripping the tendon ends.

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## 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 interosseus nerve (PIN) palsy before and after closed