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Figure 1. Injured right hand suspended with finger traps.



Figure 2. Radiograph.



Figure 3. Radiograph of splinted wrist. Used with permission of Larry B. Mellick, MD, Department of Emergency Medicine, Medical College of Georgia, Augusta, GA.

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A 50-year-old man reported falling from his bicycle onto his outstretched right arm on the day of presentation. He was first evaluated at an outside hospital, where he was found to have a “wrist dislocation” and was transferred to our emergency department for further treatment and evaluation. On examination, the patient had an obvious deformity of the right wrist, with decreased range of motion as a result of pain and a significant amount of avulsed skin on the proximal palm (Figure 1). The initial lateral radiograph of the wrist demonstrated a lunate dislocation (Figure 2). The orthopedic service was consulted and a closed reduction was attempted under procedural sedation. A postreduction radiograph was obtained (Figure 3).

For the diagnosis and teaching points, see page 314.

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DIAGNOSIS:

Inverted lunate bone postreduction. Lunate dislocations are considered one of the most severe of carpal bone injuries. As can be seen on a lateral-view radiograph (Figure 2), the capitate normally sits within the lunate cup and the lunate sits in the lunate fossa of the radius. Lunate dislocations are the result of dorsal radiocarpal ligament disruption, with the bone displaced in a volar direction, its concave distal surface facing anteriorly.¹ The radiologic appearance has been called the “spilled teacup sign.”² This patient sustained a lunate dislocation. However, the lunate bone inadvertently turned upside down when reduction was attempted under sedation (Figure 3). The patient went to the operating room, and the inverted lunate was reduced and manipulated back into the lunate fossa of the radius and the capitate was reduced onto the lunate.

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