

## Locked Out: A Rare Case of Isolated Lunate Dislocation

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### INTRODUCTION:

Lunate dislocations are rare but serious injuries that can occur from falling onto a hyperextended wrist. They are often missed due to lack of careful examination or delayed presentation. Lunate dislocation is where lunate was displaced volarly from radius and carpal bones. Typical radiographic appearances include disrupted Gilula's arch, "spilled teapot sign", and increased radiolunate angle. Late treatment leads to soft tissue damage, median nerve injury, avascular necrosis of the scaphoid and lunate, and post-traumatic osteoarthritis.

We present a case report of an isolated dislocation of the lunate with no concomitant fractures.

### REPORT:

A 56-year-old gentleman with underlying diabetes mellitus experienced right hand pain following a motor vehicle accident.

Right wrist radiograph showed lunate dislocation with no concomitant carpal bone fractures. Closed manipulative reduction attempted in Emergency Department, however failed.

Patient successfully underwent reduction under general anesthesia and Kirschner wires size 1.4mm with a diamond-shaped configuration inserted percutaneously to secure the reduction. Below elbow back slab applied postoperatively for eight weeks. Patient regained almost full wrist function three month postoperative.



Figure 1: Preoperative radiographs showing isolated lunate dislocation with no concomitant carpal bone fracture. Lateral radiograph shows "spilled teapot sign"

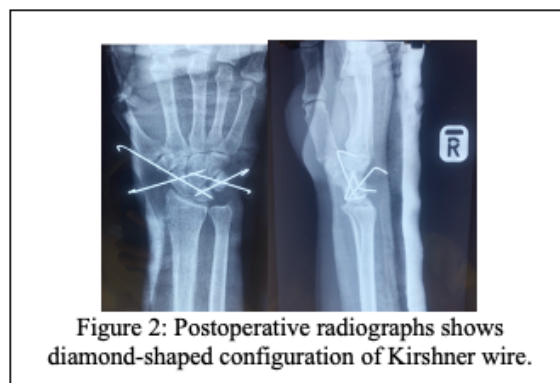


Figure 2: Postoperative radiographs shows diamond-shaped configuration of Kirshner wire.

### CONCLUSION:

Early surgical management has been found to result in better functional outcomes than conservative management. Single dorsal approach is preferred to preserve palmar wrist ligaments and give good exposure of the proximal carpal row and mid-carpal joint. Various implants, such as compression screws, cerclage wires, and Kirschner wires, have been used for stabilization after reduction. A diamond-shaped configuration provide reliable fixation as closed ring is created to prevent motion in between scaphoid, capitate, hamate, triquetrum, lunate and midcarpal joint.

In conclusion, prompt diagnosis and treatment are crucial in managing lunate dislocations to prevent long-term complications. Isolated lunate dislocations can be successfully treated with closed reduction and K-wire fixation, leading to good functional outcomes.

### REFERENCES:

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