### SURGICAL MANAGEMENT APPROACH OF PERILUNATE DISLOCATION

Dorsal approaches are typically performed through longitudinal incisions, centering on to the Lister tubercle. Between III and IV compartment: open the extensor compartment

The wrist capsule is opened with a longitudinal or transverse approaches.

2 k wires one in scaphoid and other in lunate and use them as joy stick and first pass a wire from radius into lunate and check collinear arrangement of lunate to reduce. Now pass two transverse K wires from scaphoid into lunate and reduction. The scapholunate ligament is not sutured with anchoring sutures.

Additional surgery required

 Volar approaches approach provides excellent exposure and is required when lunate cannot be reduced by closed method in addition to dorsal approach to repair scapholunate ligament. This surgery may also required in the presence of acute carpal tunnel syndrome

2. Scaphoid fractures are typically fixed using cannulated headless screw systems. When concomitant scaphoid fracture and SLIL injury are present, both injuries should be treated surgically.

3. Fracture of the radial styloid should be managed with rigid fixation by cannulated screws, headless screws, K-wires, or radial column plates. Excision of the radial styloid is not recommended

Many surgeons feel that the most critical issue in lesser arc injury : require volar and dorsal approach. Temporary intercarpal screw fixation and intraosseous cerclage wiring have been described as methods of protection of the soft-tissue repair.<sup>9,23</sup> Theoretic benefits include subdermal location, decreased infection risk, increased biomechanical stability. The surgical management of lunotriquetral interosseous ligament (LTIL) injury varies by surgeon; no published studies directly compare outcomes of treatment method. Some surgeons address LTIL injury with K-wire pinning of the joint; others stress the additional need for LTIL repair to protect against the development of volar intercalated segment instability.

Lunate Dislocation with Ac CTS Volar approach and reduce and repair



Dorsal approach to repair SLL



#### **Treatment of Chronic PLD-PLFD**

25% of perilunate dislocations missed at initial evaluation.

Managed between 7 and 45 days was not statistically significant compared with the scores of those treated within 1 week, whereas the group treated after 45 days was significantly worse.

Reports of acceptable results with open reduction and internal fixation have been published when treatment was delayed up to 6 months.

Proximal row carpectomy has successfully been used in cases delayed >2 months, although some authors believe that a prerequisite for proximal row carpectomy is an intact and uninjured proximal capitate. Total wrist arthrodesis is an option in the chronic, extensive degenerative changes.

## Complications

Posttraumatic arthrosis, median nerve dysfunction, complex regional pain syndrome, hand or wrist weakness, tendon ruptures or dysfunction, residual carpal instability, and wrist or hand stiffness.

## SLAC [Scapholunate advanced collapse]

#### SLAC stages

I : Stylo-scaphoid arthritis
II: Whole scaphoid and radius
III: Lunocapitate arthritis
IV: Whole wrist arthritis
Treatment: 1. Wrist fusion
2. PRC
3. 4 corner: When L-C arthritis: indicated

## Outcomes

A poor prognosis for return to full previous function.

Those with osteochondral fractures of the head of the capitate, and the presence of persistent carpal malalignment all imply poorer outcomes.

In these studies, most patients maintain adequate reduction, have scaphoid union, and are employed.

### Summary

Initial gentle, closed reduction is performed, followed by delayed open reduction, ligamentous and bony repair, and internal fixation.

Despite optimum treatment, this injury carries a guarded prognosis, with permanent partial loss of wrist motion and grip strength.

# References

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