

# AB069. SOH21AS126. Screw fixation of coronal plane lunate fractures—an encouraging trend?

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**Background:** Perilunate fracture-dislocations are classically high velocity injuries disproportionately affecting the young. They are associated with high morbidity due to related carpal instability and risk of avascular necrosis of the lunate. Given the relative rarity of the injury, there is no gold standard for management and a number of methods have been explored in the literature. Screw fixation of the lunate is uncommon, with only 4 previous reported cases in this fracture pattern found in the literature. We present our experience with the technique to offer guidance in this rare presentation.

**Methods:** We present the case of a 39-year-old male who presented with a Mayfield 4 perilunate dislocation and associated coronal plane lunate fracture. Lunate fixation was carried out using a headless compression screw. A review of the literature was carried out to identify similar case reports of perilunate dislocation with coronal plane lunate fractures, and their management and outcome was recorded.

**Results:** Seven additional cases were identified in the literature with perilunate dislocation and coronal plane lunate fracture. Of these, 4 were managed with screw fixation, 3 of which went on to radiographic and clinical evidence of union. In our case, union was confirmed on CT at 4 months post operatively.

**Conclusions:** Perilunate fracture dislocations are rare injuries prevalent in younger, active populations. There is no clear consensus on their management. We describe our success with open reduction internal fixation of a translunate perilunate injury with screw fixation of the lunate, and propose this as a potential emerging technique for management of these injuries.

**Keywords:** Lunate; fracture; screw; fixation; perilunate

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## Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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