What Went Wrong/Failed ORIF?
Carpal Instability

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Arthroscopic Treatment of Intercarpal Ligament Injuries Associated with Distal Radius Fractures

Jong Pil Kim, MD, et al

HYPOTHESIS
The incidence of intercarpal ligament injuries associated with distal radius fractures has been reported to be as high as 54%. If these ligamentous injuries are left untreated, the resulting chronic alteration in wrist kinematics will ultimately lead to carpal instability with chronic wrist pain.

Have I missed things over 20 years?

Even radiologists pick these up?

Signs of acute carpal instability associated with distal radial fracture

This study has established a greater than 52.1% incidence of radiographic signs of scapholunate instability in adults with acute distal radial fractures. It is incumbent upon radiologists to search for the signs of scapholunate dissociation in all adult cases of distal radius fracture, regardless of age, gender, severity of radius fracture, or mechanism of injury.
INTERCARPAL LIGAMENT INJURIES ASSOCIATED WITH FRACTURES OF THE DISTAL PART OF THE RADIUS

By Daren P. Forward, FRCS, Tommy R. Lindau, MD, PhD, and David S. Melsom, FRCS

We speculate that, in the past, treatment usually included a prolonged period of immobilization, such as in a plaster cast, which may have adequately treated some, or even most, of these carpal ligament injuries. However, with the current move toward internal fixation and early mobilization, these intercarpal ligament injuries may not heal, thereby causing clinical instability and pain. This may be why fractures do not consistently demonstrate better outcomes following open reduction and internal fixation as compared with indirect reduction techniques, which still necessitate prolonged periods of immobilization.

Conclusions: Grade-3 scapholunate ligament tears can be associated with ulnar positive variance at the time of initial presentation of a distal radial fracture and can be associated with more scapholunate joint pain at one year. These injuries could lead to scapholunate dissociation at the time of follow-up, particularly in patients with intraarticular fractures.

TAKE HOME POINT

If x-rays look good, patient has pain in acute phase, maybe slow down a bit.

Previously it was demonstrated that the prevalence of scapholunate ligament injuries increases with age. Wright et al., in a cadaver study, demonstrated a 20% prevalence of degenerative scapholunate tears in the forty-six to seventy-eight-year-old age-range. Richards et al. also suggested false-positive identification of scapholunate lesions due to confusion of acute injuries with age-related degenerative tears.

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Intercarpal relationships

Normal

Abnormal

do not recommend wrist arthroscopy when the test result is negative because of the high negative predictive value of a modified carpal stretch test.
Outcomes after locked volar plate fixation without SL injury and volar plate fixation with primary repair of SL injury are equivalent

Thank You