

## Keinbock Disease Treated With Limited Wrist Fusion:A Case Report

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### INTRODUCTION:

Kienbock disease is an isolated disorder of the lunate resulting from vascular compromise to the bone that leads to carpal collapse, joint incongruity, and osteoarthritis. We report this case because it is a rare occurrence in our center, and surgical outcome is promising.

### CASE REPORT

24 years old man complaints of right wrist pain after involved in a road traffic accident 4 years ago. He initially treated for soft tissue injury however symptoms are progressively worsening for the past 1 year. On examination, there is tenderness over dorsal aspect of radiocarpal joint, restricted movement of wrist and reduced grip strength. Plain radiograph showed sclerosis and collapse of lunate bone with degenerative changes of radiocarpal joint. Computed tomography of right wrist consistent with stage IV keinbock disease. Patient underwent partial wrist fusion. Post operatively, right wrist was immobilized for 6 weeks. At 9month follow up, the result is promising with completely painless right wrist and improvement of grip strength.

### DISCUSSIONS:

Keinbock disease is osteonecrosis of lunate bone, it progresses slowly to various stage of disease, and eventually lunate bone collapses, altering surrounding carpal bone architecture. With the progression of the disease, symptom of synovitis predominate, and in late stage arthritis on radiocarpal joint associated with carpal collapse are the predominant pathologic condition and painful limited wrist motion are final clinical outcome (1). There is little evidence to support any particular form of operative treatment, or to indicate its superiority over conservative measures(2). According to Amadio and Moran, surgery is indicated only for patients with symptomatic disease after an adequate trial of immobilization and anti-inflammatory medication(3). Partial wrist fusion is one of surgical management in advance stage of keinbock disease. It has been reported to get good result by stabilizing the midcarpal joint

and arresting the proximal migration of carpal bones(4). A. D. Tambe et al in his study revealed limited fusion group did better in wrist range of motion and grip strength(5). In our case report, we have done scaphocapitate arthrodesis and after 9 month of follow up, successful fusion of the involved joint achieved, pain improved and patient able to return to work.

### CONCLUSION:

In conclusion, keinbock disease treated with limited wrist fusion has acceptable result that allows patient to return to work with painless wrist and improved grip strength.

### REFERENCES:

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