

## **“PROSPECTIVE AND RETROSPECTIVE ANALYSIS OF OUTCOME IN MANAGEMENT OF SCAPHOID FRACTURE WITH HERBERT SCREW FIXATION”**

**Background:** Although scaphoid fractures are treated uneventfully with cast treatment, immobilization with cast is associated with complication like wrist stiffness and functional morbidity to the patient. Fixation with Herbert Screw though technically demanding procedure can yield excellent results and prevents complication like non-union and loss of wrist function in fracture of fractures.

**Objectives:** To assess the outcome of scaphoid fracture after operative management following Herbert screw fixation in patient attending Institute of Orthopaedics & Traumatology, Rajiv Gandhi Government General Hospital & Madras Medical College between March 2017 – August 2018.

**Materials & Methods:** All scaphoid fracture, treated between the above period and those previously treated patients were followed up retrospectively. Ten patients with scaphoid fractures were treated with Herbert screw. All of them were male. Serial radiographs were taken to assess radiographic union and functional outcome was assessed using Modified Mayo wrist score.

**Results:** Out of 10 patients, 7 scaphoid had waist fractures and two had proximal pole fractures and one with distal pole fracture. 8/10 scaphoid fractures were treated with open reduction and Herbert screw fixation either by volar approach or by dorsal approach and rest two by percutaneous approach. All fractures maintained good alignment post operatively. Seven (70%) patients had excellent results with normal wrist range of motion, two (20%) patients had good results and one (10%) patient had fair outcome. Radiological union was seen in all cases with average duration to union noted in the study was 7.2 weeks (range:6-10 weeks). We encountered complications like scar sensitivity in 2 cases and wrist pain in 2 and stiffness in 3 cases.

**Conclusion:** Our study has shown that internal fixation using the Herbert screw results in rapid symptomatic relief and functional recovery with sufficient stability to

allow normal use of the wrist. Orientation of the screw and length of the screw plays a major role in preventing the late complications like arthritis and wrist pain.

**Key Words:** Scaphoid fracture, Herbert screw, Functional outcome