

AN ASSESSMENT OF THE FUNCTIONAL OUTCOME OF SCAPHOID NON-UNION TREATED WITH HERBERT SCREW AND BONE GRAFTING: CLINICO-OBSERVATIONAL STUDY

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Abstract

Aim: The aim of this study to evaluate the functional outcome of scaphoid non-union treated with bone grafting and Herbert screw fixation.

Material and Methods: This study was done the Department of Orthopaedics, Anugrah Narayan Magadh Medical College and Hospital, Gaya, Bihar, India for 15 months. 50 cases were referrals from peripheral centers with a possible diagnosis of scaphoid non-union after failed conservative treatment. 50 patients were initially assessed with fresh radiographs and MRI wrist was taken in all cases. The injuries were classified according to Herbert's Classification. Clinical examination included the assessment of tenderness, active and passive range of movement in wrist, and grip strengths were also measured. A firm padded removable splints were used to support the wrist for the first two weeks and after the suture removal, patients are advised to start mobilizing exercises of the wrist.

Results: There were 50 cases of scaphoid non-union treated with Herbert screw fixation and cancellous bone grafting. All the patients were males and dominant hand was involved in 45 cases. Out of 50 patients 22 patients had road traffic accidents, 25 had fall on outstretched hand and 3 fracture caused by assault. The right wrist was affected in 42 cases and left in 8 patients. The mean time from injury to surgical fixation was 15 months. The mean age of the patients was 28.5 years. Our study resulted in 60% excellent, 30% good and 10% fair functional outcomes. 98% of patients were satisfied with the outcome of the procedure mostly because they could return to job with a painless joint. Most of our patients had moderate to severe pain preoperatively, but 86% cases had no pain at the latest review.

Conclusion: We concluded that the healing of the non-union is better than that in other surgeries like k wire fixation or bone graft surgeries alone.

Keywords: