

TREATMENT OF BONY Mallet Finger USING THREADED KIRSCHNER WIRE

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INTRODUCTION

- The best approach to the treatment of mallet fractures involving more than one third of the articular surface of the distal phalanx is controversial
- This study describes the technique and outcome of using threaded Kirschner wire to treat mallet fractures involving more than one-third of the articular surface

METHODS

- 47 patients (30 men , 17 women)
- Mean age: 38.2 years
- Treated by open reduction and fixation with one threaded and one smooth K-wire under direct vision (Figure 1, 2)
- Mean time from fracture to operation was 4.1 days
- Radiographic and clinical assessments were made according to the Crawford criteria



Figure 1



Figure 2

RESULTS

- Mean follow-up period was 19.6 months
- According to the Crawford criteria, the results were excellent in 32 patients (69%), good in 12 patients (26%) and fair in 3 patients (6%) (Figure 3, 4, 5)
- Mean loss of active extension of the DIP joint was 3°
- Mean active flexion was 71°
- Radiographic union was achieved in all patients at the time of follow-up (Figure 6)
- There was no intraoperative fragmentation of the bone
- None of the patients developed skin necrosis or fixation failure such as pulling-out of the K-wire with subsequent loss of reduction

CONCLUSION

- The use of threaded K-wire is a reliable means of achieving and maintaining reduction of mallet fractures with an open surgical technique



Figure 3



Figure 4

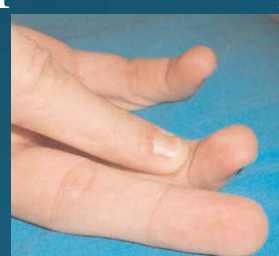


Figure 5



Figure 6