

Poor Man's External fixation for comminuted intra-articular phalangeal fractures

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INTRODUCTION

K-wiring of the phalanges has been utilized as treatment of finger fractures with significant intraarticular extensions. External fixations offer a stable & readily available construct which could possibly be a definitive treatment in cases of complex phalangeal fractures. It is a basic procedure which can be readily done by those who aren't specialized in Hand surgeries with the basic equipments available at the Hospital. K-wiring of finger fractures provides a quick and stable treatment for complex intra-articular fractures.

REPORT

A 53yo man presented following a road traffic accident sustaining an Open fracture of the middle phalanx of the right ring finger. During K-wiring with II guidance, there was comminution over the base of the middle phalanx with intra-articular involvement, also with an extensor tendon 80% cut. Articular surface of the base of middle phalanx of right ring finger restored with K-wire. K-wires were then inserted over the proximal and middle phalanx of right finger & external fixator assembled with K-wire.

DISCUSSION

K-wiring of intra-articular phalangeal fractures come with its own set of challenges. Often the fractures are severely comminuted with poor contact between fracture fragments, and K-wiring might cause further fracture. Sometimes it is difficult to get a good alignment. Caution must be observed to avoid perishing blood supply due to excessive soft tissue dissection and periosteal stripping.

CONCLUSION

External fixation with K-wires is a useful technique to use when dealing with comminuted & intra-articular phalangeal fractures, especially those cases where single K wires will not provide stable fixation for the fractures. It is also suitable for spanning of comminuted fracture and aids in achieving good length, alignment & rotation of the

fracture in which is difficult to achieve with a normal K-wiring. In an instance where removal became necessary, these K-wires would not be difficult to remove and does not require the need for operation theatre.



Figure 1. Trauma x-rays of the right hand showing comminuted fracture with intra-articular involvement.



Figure 2. Post operative x-rays of the right hand & right ring finger.



Figure 3. Wound over Right ring finger .

REFERENCES

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