

Outcome Of Radial Collateral Ligament Injury Repair Of Thumb Metacarpophalangeal Joint

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INTRODUCTION:

Radial collateral ligament (RCL) injuries of the thumb are relatively common despite not being as common as ulnar collateral ligament injuries. Complete disruption of the RCL (Grade III) can result in both static and dynamic instability hence it is preferably treated surgically. The purpose of this study is to assess the outcome of RCL injury repair of thumb in our population.

MATERIALS & METHODS:

There were 5 patients with Grade III thumb RCL injury which were reviewed retrospectively from the period of 2012 till 2017. Anchor suture technique was used to repair the RCL and K-wire is used to transfix the MCP joint in a functional position while repair of the capsule and abductor aponeurosis was done with 3-0 braided sutures (Fig 2). A thumb splint cast was applied to immobilize the thumb for a period of 6 weeks. Postoperatively, patients were assessed based on the Catalano's grading system to determine the outcome.

RESULTS:

There were 3 excellent and 2 goods result following the repair based on the grading system. Most of the patient had return to ADL 3 months after surgery. Satisfaction following surgery was achieved as early as 6 months (1 patient) to 1 year.



Figure 1: Fixation of MCP joint with k-wire and anchor suture insertion intraoperatively.



Figure 2: Repair of the radial most aspect of dorsal capsule and abductor aponeurosis.

DISCUSSIONS:

Injury to the thumb should be given special attention as thumb is required to perform dexterous and to maintain grip. Grade I and II injury can be treated non-operatively, while surgery is recommended for grade III injury. If left untreated, it can cause instability of the MCP joint and later on pain, weakness and arthritis.

CONCLUSION:

Surgical repair of radial collateral ligament injury of thumb is a rewarding surgery as it gives patient good satisfaction and functional outcome.

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