

Lacerations with flexor tendon involvement

Outcomes to be expected

In the absence of a rupture or infection the patient should be able to expect a functional range of active motion at 3 months from injury

First aid treatment and referral pathways

- For all first aid measures see Hand Injury Triage guidelines at https://www.bssh.ac.uk/hand_trauma_app.aspx
- Referral category green – The patient should be seen at the next available soft tissue hand clinic (ideally within 24 hours).

Consent – principle of shared decision making

- Discussion with the patient should include all options, an outline of their rehabilitation requirements for each option, and the likely outcomes
- The patient's values, occupation and hand function requirements should be discussed and considered in a joint decision making process
- Examples of this:
 - Whether to repair an isolated forearm laceration of FDS to the little finger
 - Whether to repair FDP or FDS if one is intact

Decision making documentation

- The factors that have been considered in making a management decision should be documented, particularly where the surgeon and patient have agreed an option that might not be a common approach

Non-operative management options

When non-operative management has been selected the patient should be given access to a competent hand therapist for supervision of their recovery to a functional range of motion

Operative management requirements

Timing

- Within 4 days.

Staff

- Done or supervised by a surgeon who is competent in flexor tendon repair

Environment

- Tendon repair involves the insertion of foreign material into a relatively poorly vascularised structure and should be carried out in a designated operating theatre

Equipment

- Light
- Hand surgery instrumentation
- When needed, tourniquet and the associated infrastructure

Technical aspects

- A suitable core suture should be selected for the size of the tendon. For example in an adult zone 2 this would be a minimum 4 strand locking configuration with at least a 3.0 calibre suture
- The technique used and level of the laceration as well as which pulleys have been damaged or released must be clearly documented in the operation note

Therapy requirements

- Access to a competent hand therapist who will provide the support needed for a controlled active motion rehabilitation regime – see separate therapy standards for flexor tendons
- The first visit to a therapist after surgery should take place in 3-5 days
- Patients should be offered therapy at weekly intervals for the first 6 weeks at least.
- There should be easy communication and rapid access to the surgical team if the therapist has concerns at any point
- Follow up should continue to a minimum of 12 weeks

Audit

- Regular or rolling audits of
 - Treatment times for surgery and therapy
 - Infection rate
 - Rupture rate
 - Tenolysis rate
 - DASH or other PROM score
 - TAM of the digits

References

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