



BRITISH ASSOCIATION
OF HAND THERAPISTS

Standards of practice in the rehabilitation of surgically repaired finger extensor tendons injuries: zones V-VI

Endorsed by:

British Association of Hand Therapists

Devised by the Extensor Tendon Injuries Standards Working Group, 2022

Further information is available from: <https://www.hand-therapy.co.uk>

This BAHT Standard has been developed to compliment the respective BSSH Standard of Care in Hand Trauma. It is based on research and expert opinion.



Standards:

1. Following surgery all patients should be referred to a specialist hand therapist or appropriately trained therapist with direct access to specialist support for assessment and formulation of a treatment plan. Access to accurate operative details is required.
2. There should be easy communication and rapid access to the Hand team/surgical team if the therapist has concerns at any point.
3. Following a robust repair the selected rehabilitation regimen should be initiated ideally between three to five days and before seven days.
4. A controlled protective active movement rehabilitation regimen should be offered and supported by a therapist/ therapy team. The exact regimen should be dictated/ justified on nature of injury, strength of surgical repair, other structures involved and following shared decision making with the patient.

Options available are: MCPjt blocker/ Early Active motion (EAM Norwich) regime/ Relative Motion Splinting (RMS) regime, previously known as Immediate Continuous Active Motion (ICAM) regime or Merritt regime/ Dynamic splint

5. The postoperative rehabilitation regimen should be supported by verbal, written and / or electronic information.



6. Patients should be offered regular hand therapy appointments depending on the patient's clinical need such as: tendon integrity and glide, compliance, fit of splint, swelling and wound/skin quality.
7. A set of outcome measures should be taken during therapy and upon discharge. This should include range of motion (ideally including the contralateral side), strength and patient reported outcome measures (PROM).
8. In the absence of a satisfactory outcome for the patient, onward referral to a hand surgeon for consideration of further management options should be considered.

Implementation of these standards should be used to guide and advise therapists in the clinical setting. However, it is recognised that care may be influenced by factors including access to hand therapy, injury as well as patient characteristics. Professional judgement, based on clinical reasoning, will strongly influence the management and outcome.

References

Collocott, Kelly and Ellis: Optimal early active mobilisation protocol after extensor tendon repairs in Zones V and VI: A Systematic Review. *Hand Therapy* 2018, vol 23 (1) 3-18

Hirth, Bennett, Mah, Farrow, Cavallo, Ritz and Findlay. Early return to work and improved range of motion splinting: a retrospective comparison with immobilisation splint for zones V and VI extensor tendon repairs. *Hand Therapy* 2011; 16, 86-94

Hirth, Howell, Brown and O'Brien: Relative Motion Extension Management of Zones V and VI Extensor Tendon Repairs: Does international practice align with current evidence? *Journal of Hand Therapy* 34 (2021) 76-89.



Merritt, Wong and Lalonde: Recent Developments and Changing Extensor Tendon Management. *Plastic and Reconstructive Surgery* (March 2020), vol 145, 3, 617e-628e

Svens, Ames, Burford and Caplash. Relative active motion programs following extensor tendon repair: A pilot study using a prospective cohort and evaluating outcomes following orthotic interventions. *Journal of Hand Therapy* (2014) 1-8

Sylaidis, Youatt and Logan: Early active mobilisation for extensor tendon injuries: The Norwich regime. *Journal of Hand Surgery* (1997) 22B: 5 594-596

Wong, Wilson, Girnary, Nojoomi, Acharya, and Paul: The optimal orthosis and motion protocol for extensor tendon injury in zones IV-VIII: A systematic review. *Journal of Hand Therapy*, 2017; 30 (4) 447-456

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