BRITISH ASSOCIATION
OF HAND THERAPISTS

Standards of hand therapy practice in the rehabilitation of surgically repaired nerve injury

Endorsed by:

British Association of Hand Therapists

Devised by the Nerve Trauma 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

Simple digital nerve repair with no tension

- Do not need to be routinely seen by a hand therapist.
- Refer to local pathways for referral to a specialist hand therapist if complications of reduced ROM, scarring, diminished/absent sensation or hypersensitivity affect function.
- Written and audio-visual information should be supplied where appropriate with contact information.

Major peripheral nerves, grafts and digital nerves under tension

- The first visit to a hand therapist after surgery should take place within 7 days, before adhesions become established.
- Written and audio-visual information regarding nerve injury and therapy management should be supplied.
- Splinting to prevent gapping in repaired nerve is recommended for up to 3 weeks post-operatively with safe active/passive ROM.
- Access to a specialist hand therapist who will provide an extended period of support and advice on desensitisation, sensory re-education, maintenance of passive ROM, active exercises and function with splinting and, where motor nerves are involved, muscle retraining.
- Patients with altered sensation should be advised regarding the increased sharps and burns risks.
- Sensory assessment by a specialist hand therapist should be carried out, where tools and skills are available, at 3, 6 and 12 months post op for

peripheral nerve repairs/grafts. Assessment should incorporate at least one standardised assessment, preferably Semmes-Weinstein filaments (SWF)/WEST monofilaments.

- Early phase sensory re-learning should be initiated as soon as possible after injury or surgery. The timing of progression to late phase should be guided by the results of sensory assessment with SWF/WEST.
- Monitor for neuroma, neuralgia and CRPS and intervene as appropriate with therapy interventions and/or refer on for medical management.
- Therapists treating major nerve injuries must assess psychosocial factors and action as appropriate.

References

Dahlin LB, Wiberg M. Nerve injuries of the upper extremity and hand. EFFORT Open Reviews. 2:158-170. 2017

Dunlop RLE, Wormald JCR, Jain A. Outcome of surgical repair of adult digital nerve injury: a systematic review. BMJ Open 2019, 9:e025443. Doi: 10.1136/bmjopen-2018-025443

Novak CB, von der Hyde RL. Rehabilitation of the upper extremity following nerve and tendon reconstruction: when and how? Semin Plas Surg 29:73-80. 2015

Rosen B, Bjorkman, Boeckstyns M. Differential recovery of touch thresholds and discriminative touch following nerve repair with focus on time dynamics. Hand Therapy 19(3):59-66/ 2014

Membership of the Standards Working Group

Sarah Mee

Hayley Smith

Emma Bamford

Miriam Parkinson