

FHL tendon transfer protocol

Initial rehabilitation phase 0-6 weeks

- To be safely and independently mobile with appropriate walking aid, adhering to weight bearing status
- To be independent with home exercise programme as appropriate
- To understand self management / monitoring, e.g. skin sensation, colour, swelling, temperature, etc

Treatment:

- Pain-relief: Ensure adequate analgesia
- Elevation: ensure elevating leg with foot higher than waist
- Exercises: teach circulatory exercises
- Education: teach how to monitor sensation, colour, circulation, temperature, swelling, and advise what to do if concerned
- Mobility: ensure patient independent with transfers and mobility, including stairs if necessary

On discharge from ward:

- Independent and safe mobilising, including stairs if appropriate
- Independent with transfers
- Independent and safe with home exercise programme / monitoring

Milestones to progress to next phase:

- Out of POP. Team to refer to physiotherapy at 6 weeks

Recovery rehabilitation phase 6 weeks – 12 weeks

- To be independently mobile out of plaster shoe / aircast boot
- To achieve full range of movement
- Tendon transfer to be activating
- To optimise normal movement

Restrictions:

- Ensure adherence to weight bearing status.
- No strengthening against resistance until at least 3 months post-operatively
- Do not stretch transfer. It will naturally lengthen over a 6 month period

Treatment:

- Pain relief
- Advice / Education
- Posture advice / education
- Mobility: ensure safely and independently mobile adhering to appropriate weight bearing restrictions. Progress off walking aids as able once reaches FWB stage.
- Gait Re-education
- Wean out of aircast boot once advised to do so. Provision of plaster shoe if patient unable to get into normal footwear

Exercises:

- Passive range of movement (PROM)
- Active assisted range of movement (AAROM)

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- Encourage isolation of transfer activation without overuse of other muscles.

Biofeedback likely to be useful.

- Strengthening exercises of other muscle groups as appropriate
- Core stability work
- Balance / proprioception work once appropriate
- Stretches of tight structures as appropriate (e.g. Achilles Tendon), not of transfer.
- Review lower limb biomechanics. Address issues as appropriate.
- Swelling Management

Manual Therapy:

- Soft tissue techniques as appropriate
- Joint mobilisations as appropriate ensuring awareness of those which may be fused and therefore not appropriate to mobilise
- Monitor sensation, swelling, colour, temperature, etc
- Orthotics if required via surgical team
- Hydrotherapy if appropriate
- Pacing advice as appropriate

Milestones to progress to next phase:

- Tendon transfer activating
- Full range of movement
- Mobilising out of aircast boot / plaster shoe
- Neutral foot position when weight bearing / mobilising

Failure to meet milestones:

- Refer back to team / Discuss with team
- Continue with outpatient physiotherapy if still progressing

Intermediate rehabilitation phase 12 weeks – 6 months

- Independently mobile unaided
- Optimise normal movement

Treatment:

- Further progression of the above treatment:
- Pain relief
- Advice / Education
- Posture advice / education
- Mobility: Progression of mobility and function
- Gait Re-education

Exercises:

- Range of movement
- Progress isolation of transfer activation without overuse of other muscles.

Biofeedback likely to be useful.

- Strengthening exercises as appropriate
- Core stability work

- Balance / proprioception work
- Stretches of tight structures as appropriate (e.g. Achilles Tendon), not of transfer.
- Review lower limb biomechanics. Address issues as appropriate.
- Swelling Management

Manual Therapy:

- Soft tissue techniques as appropriate
- Joint mobilisations as appropriate ensuring awareness of those which may be fused and therefore not appropriate to mobilise
- Monitor sensation, swelling, colour, temperature, etc
- Orthotics if required via surgical team
- Hydrotherapy if appropriate
- Pacing advice as appropriate

Milestones to progress to next phase:

- Independently mobile unaided
- Transfer to be activating
- Adequate analgesia

Failure to meet milestones:

- Refer back to team / Discuss with team
- Continue with outpatient physiotherapy if still progressing

Final rehabilitation phase 6 months – 1 year

- Return to gentle low impact sports
- Good transfer activation with grade IV / V plantarflexion strength
- To be able to do tip toe stand
- Establish long term maintenance programme

Treatment:

- Mobility / function: Progression of mobility and function, increasing dynamic control with specific training to functional goals
- Gait Re-education

Exercises:

- Progression of exercises including range of movement, strengthening, transfer activation, balance and proprioception, core stability
- Swelling Management

Manual Therapy:

- Soft tissue techniques as appropriate
- Joint mobilisations as appropriate ensuring awareness of those which may be fused and therefore not appropriate to mobilise
- Pacing advice

Milestones for discharge:

- Independently mobile unaided
- Transfer to be activating with grade IV / V inversion strength
- Able to do single tip toe stance