

TREATMENT PROTOCOL – ACHILLES TENDON RUPTURE NON-SURGICALLY TREATED

Week 0:

Treatment: Walker brace with 3 heel pads, weight-bearing through the heel as tolerated, use of 2 crutches. Referral to orthopedic technician for shoe heel-lift (use shoe with heel-lift on the healthy side).

Walker brace: Allowed to take off the walker brace for washing and aerating the foot. When the walker brace is removed, no weight-bearing or dorsal extension of the foot is allowed. Wearing the walker brace while sleeping.

Exercise program: home exercises daily wearing the walker brace – move the toes several times a day

After 2 weeks:

Treatment: Walker brace with 2 heel pads (take off the upper pad), full weight-bearing, use of 2 crutches if needed.

Exercise program: home exercises as described above.

After 4 weeks:

Treatment: Walker brace with 1 heel pad, full weight-bearing

Exercise program: home exercises daily as described above

After 6 weeks:

Treatment: Walker brace without heel pad, full weight-bearing

Exercise program: home exercises daily as described above

After 8 weeks: Visit orthopaedic surgeon

Treatment: Wean off walker brace. Use of shoes with heel-lift (until 14 weeks after injury), compression stocking to prevent swelling.

Exercise program: *Important that all exercises are performed slowly and carefully*

Home exercises:

- Active ankle exercises for ROM, ankle exercises (DE, PF, Sup, Pron) with rubber-band, balance exercises, sitting heel-rise, standing heel-rise (50% weight-bearing or less on the injured side), gait training.

Visit to physical therapist 2 times per week:

- Exercise bike
 - Active range of motion (ROM)
 - Sitting heel-rise – with weight (starting position from the shoe heel-height)
 - Standing heel-rise on two legs
 - Active plantar flexion with a rubber-band (max 0° plantar flexion)
 - Supination- and pronation – exercises with a rubber-band
 - Gait training
 - Balance exercises (not wobble boards or balance pods)
 - Squats (fitness ball behind the back)
 - Other knee/hip-exercises with no ankle involvement
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After 10 weeks:

Treatment: Use of shoes with heel-lift until 14 weeks after injury, compression stocking to prevent swelling.

Exercise program: *Important that all exercises are performed slowly and carefully*

Home exercises: As described above

Visit to physical therapist 2 times per week:

- As described above, increase the intensity
 - Sitting heel-rise – with weight (starting position from the shoe heel-height)
 - Standing heel-rise on two legs - transcend gradually to one leg
 - Active plantar flexion, supination and pronation in a cable machine
 - Heel-rise in leg press
 - Balance exercises (wobble-board, balance pods-weight bearing in the middle of the foot)
 - Step (walk slowly)
 - Cable machine standing leg lifts
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After 12 weeks: Evaluation at Lundberg Lab

Treatment: Use of shoes with heel-lift until 14 weeks after injury, compression stocking to prevent swelling.

Exercise program: *Important that all exercises are performed slowly and carefully*

Home exercises: As described above and walking 20 min per day

Visit to physical therapist 2 times per week:

- As described above, increase the intensity
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After 16 weeks:

Treatment: Use of regular shoes after 14 weeks, barefoot after 16 weeks, compression stocking to prevent swelling.

Exercise program: *Important to gradually increase the load considering the patient's status*

Home exercise: Walking 20 min per day

Visit to physical therapist 2 times per week:

- Intensify the exercises by increasing load (as before)
 - Increase the load gradually from two leg standing heel-rises to one leg standing heel-rises both concentrically and eccentrically
 - Start with gentle jog (thick mattress, in 8's, zig-zag)
 - Start with two-legged jumps and increase gradually
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After 18 weeks: Evaluation at Lundberg Lab 6 and 12 months after injury, visit orthopaedic surgeon 6 months.

- Running outdoors, if the patient has a good technique
- Group training (similar to aerobics, adapted for knee-injured patients)
- Return to sports earliest after 20 weeks (non-contact sports) and 24 weeks (contact sports)
- Possibility for the patient to be evaluated at Lundberg Lab before 6 months if needed to estimate the ability to return to sports.