

7 STEPS PROTOCOL FOR ACHILLES TENDINOPATHY →

Achilles tendinopathy is a prevalent condition affecting athletes that often leaves patients incapacitated for long periods. Symptoms can sometimes gradually worsen until the person must stop exercising altogether.

Achilles tendinopathy is typically more than an acute trauma, caused by repeated external micro-strains that eventually exceed the tendon's intrinsic capacity to support external loads. Conservative treatments are frequently applied, except in the case of a rupture, which may be the first clinical sign of the condition.

THE REHABILITATION PROTOCOL MUST TACKLE THE DISORDER FROM DIFFERENT ANGLES, INCLUDING:

- 1.** Detecting and removing (when possible) the causes of the overall dysfunction of the forces of neuromuscular transmission, including any potential postural imbalances or other stresses (inadequate footwear, excessive training). Looking at the potential existence of nutritional or hormonal imbalances, anemia or hyperimmune response.
- 2.** Refraining from physical effort that causes pain higher than 2 on a scale of up to 10, while monitoring effects of each training session for the following 48 hours. Athletes often need to stop any physical activity that puts loads on the tendon, such as running, but biking, uphill walking, elliptical step machines and swimming are allowed.
- 3.** Maintaining an eccentric stimulus to orient the new fibers relative to the lines of force. Tendons can heal completely, but it takes time. A cycle of about 100 days is needed for the structure to

completely rebuild itself. A single five-minute session involving a slow descent down steps on both feet is recommended. This exercise should be discontinued if it causes pain higher than 3 on a scale of up to 10.

- 4.** Accelerating the biological reparative process with radial shock wave therapy (2,500 shocks of up to 3 bar, adjusting the frequency for the subject's pain tolerance). One therapy session per week for three weeks is recommended.
- 5.** If the gliding action of the subcutaneous peri-tendinous tissue is found to be altered, a peri-tendinous injection can be administered containing a hyperosmotic solution (lidocaine, arnica, placentex and physiological saline solution), followed by a massage using deep transverse friction to mobilize tissue.
- 6.** As the functional overload is mostly absorbed by muscle mass, an electrical muscle stimulation protocol is also followed for strength training to provide high stimulation without applying mechanical stress. Essentially isometric exercises are performed for the posterior kinetic chain and for core stability.
- 7.** Antioxidant supplements are prescribed, and eating habits kept in check.

Exercise can always be resumed within three months. It must be gradual, ensuring that the physical activity does not cause pain higher than 2 on a scale of up to 10, either during exercise or within the following 48 hours. That is why underloading requires an adequate recovery period of two days between sessions.