

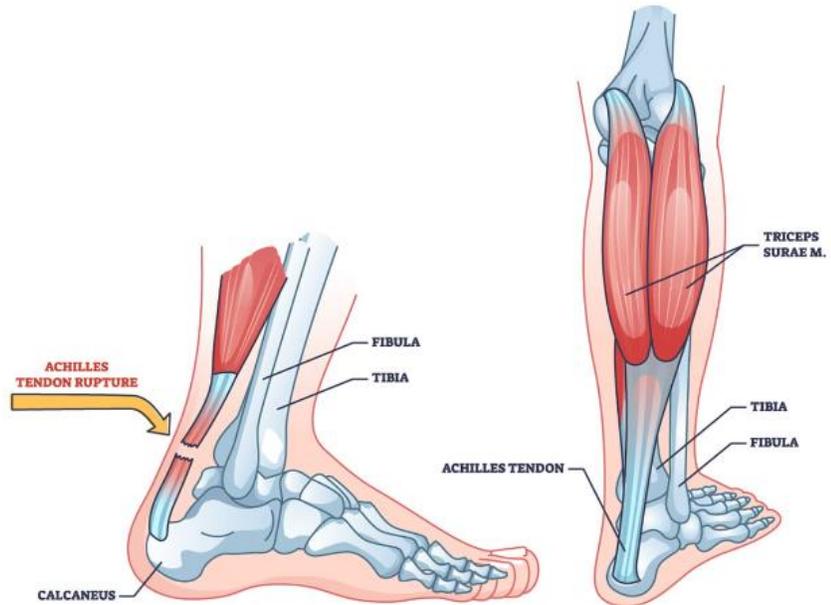
YOUR GROUP23

PATIENT HEALTH JOURNEY

BECOME AN EXPERT: Achilles Tendon Rupture

Understanding Tendons and Tendon Ruptures

Tendons are living tissues within our bodies that attach muscles to bones. The primary role of tendons is to transmit the force generated by a contracting muscle, thereby allowing movement to occur. We like to describe tendons as 'white' tissues, meaning they do not have a large amount of blood supply, compared to muscles which are considered 'red' tissue and have a large amount of blood supply. This means that by nature tendons are slower to recover than muscles because our bodies healing process utilizes blood and its constituent cells (platelets).



A very important concept to understand as it relates to tendons is that of **load capacity**. Load capacity means that the tendon tissues can only absorb a certain amount of force before they begin to break down. If a tendon experiences an acute (sudden), powerful force that far exceeds its load capacity, it can tear or rupture. This tear or rupture can be caused by direct contact on the tendon itself, or through an indirect method such as an overstretch of the tendon.

So what is an Achilles tendon rupture?

The Achilles tendon is a strong tissue that attaches the calf muscles to the heel bone. It is responsible for transmitting the forces generated by the calf muscles to the heel bone, allowing for movement such as plantar flexion of the foot (pointing the toes down) to occur. An **Achilles rupture** is one of the most common tendon injuries in the adult population, especially in individuals aged 30-50. With an ever-ageing population, the rate at which Achilles ruptures occur has been steadily increasing over the years. Ruptures happen most commonly when an individual lands while in dorsiflexion (toes up), causing a sudden force on the Achilles that it cannot support. Acute ruptures present with a sudden onset of severe pain, with a loud "snap" or "pop" in the lower leg. An acute rupture is common in athletes who play sports such as football, soccer, and rugby. It is more common in older individuals due to the wear and tear of the tendon tissues over time, making them weaker.

After rupturing the Achilles tendon, the chances of a re-rupture in the same tendon are 3-6% greater when compared to a healthy tendon. The goal of a rehabilitation protocol is to **increase the size and strength** of the Achilles tendon to minimize the risk of re-rupture. An effective protocol will increase the load capacity of the injured tendon so that it is able to absorb and transfer a larger force. This is done by loading the tendon over a long period of time. By having a continuous low load, it teaches the tendon to adapt to the load and become stronger.

BECOME AN EXPERT cont'd

Why does this matter?

At Group23, we often see patients frustrated with their symptoms, lack of improvement, and the cost of ineffective treatments, products, and devices. Often the biggest issue we see with a diagnosis is the patient's lack of knowledge of the subject because no one has taken the time to explain what is truly happening! It's not enough to just know the words Achilles tendon rupture; it's important to us that you understand what it means!

Now that you know more about Achilles tendon ruptures, we can address treatment options that will allow you to return to sport/activity as soon as possible. No matter where you start, you can get to the point of less pain and improved functionality... **IF** you create SMART goals, utilize the options in your Toolkit, and commit to working proactively with your Group23 Health Journey team!

Our care philosophy

We see treatment choices as a Patient Health Journey, and we take pride in being on this Journey with you the entire way.

The most crucial part is becoming an expert and creating Rise Above goals specific to you and your lifestyle. Once your Group23 healthcare team understands your destination, we can accurately create a treatment plan that is fit for you!



Check out a free lifestyle assessment, available with the Health & Wellness team!



Surgery is a possibility, but a last resort option in the case of Achilles tendon ruptures. We have a whole Toolkit of other options to try first!



Becoming an expert and setting a SMART goal ensures every treatment decision reflects your priorities, not ours!



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