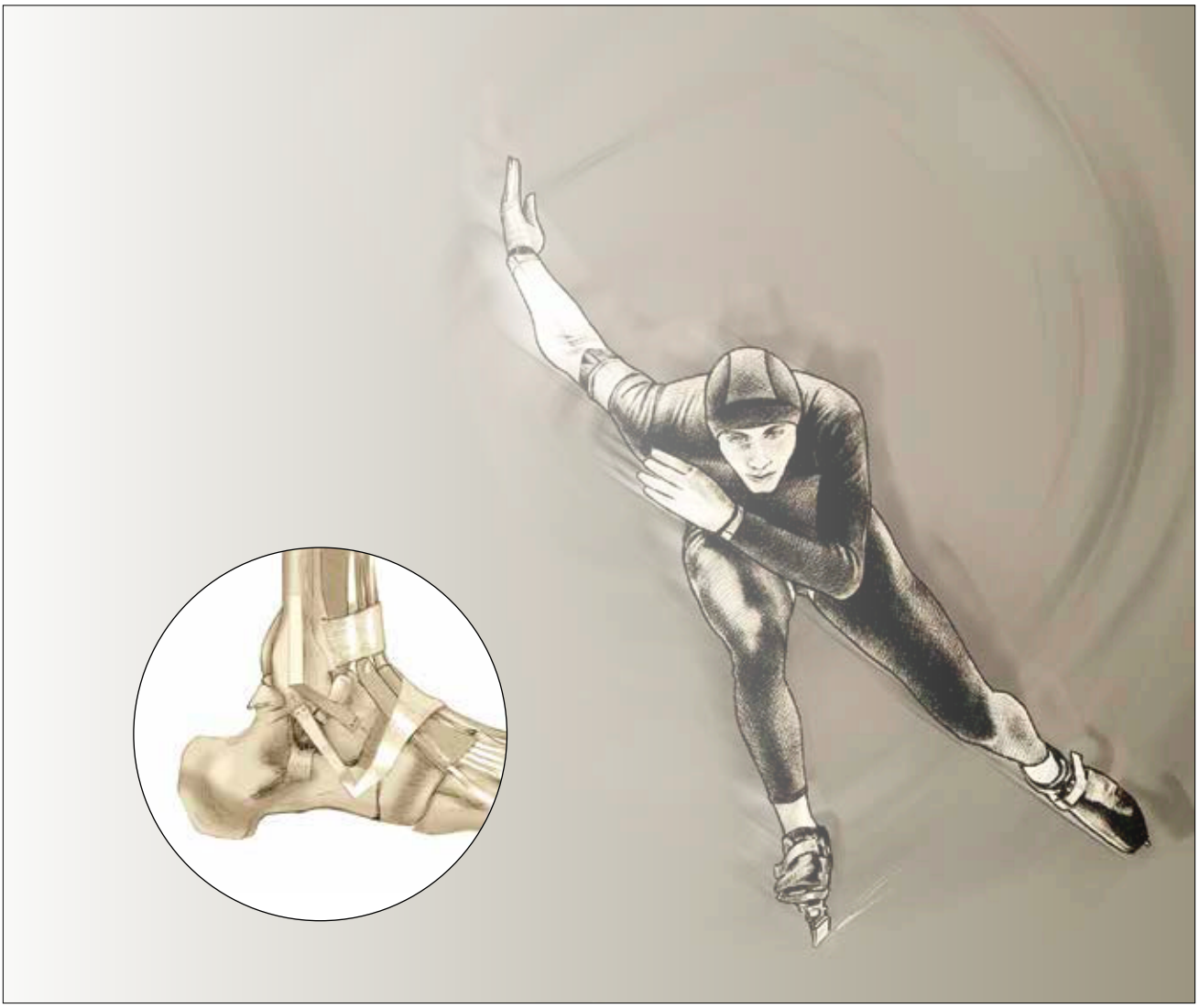
YOU ARE GOING TO UNDERGO

ANKLE LIGAMENT RECONSTRUCTION



ORTHOPAEDIC SURGERY
and sports traumatology
Doctor Philippe Paillard Office

YOU HAVE ANKLE INSTABILITY

YOU ARE GOING TO UNDERGO ANKLE LIGAMENT RECONSTRUCTION

What is ankle instability?

The ankle is the joint between the bottom of the tibia and the fibula and the upper part of the talus, which is the first bone in the foot located just above the calcaneus. The sliding surfaces are lined with cartilage.

The ligaments are ribbons of varying elasticity that help maintain the stability of the ankle. The external lateral ligaments are located on the lateral side of the ankle and connect the fibula to the talus and the calcaneus. There are three ligaments that prevent the ankle and the foot twisting inwards: the anterior and posterior talofibular ligaments, which connect the fibula to the talus, and the calcaneofibular ligament, which stretches between the fibula and the calcaneus (figure 1 and 2).

The anterior talofibular and calcaneofibular ligaments of the external lateral ligaments are more often affected during a trauma (figures 3 and 4). They can be simply distended or completely ruptured, resulting in ankle swelling and pain. We thus talk of a sprained ankle, which can be more or less serious and require immobilization for the ligament to heal.

Recurrent sprains reduce the capacity of the ligament to heal spontaneously in an effective position, thus decreasing the stability of the ankle. We thus talk of ankle instability responsible for pain and feelings of giving way.

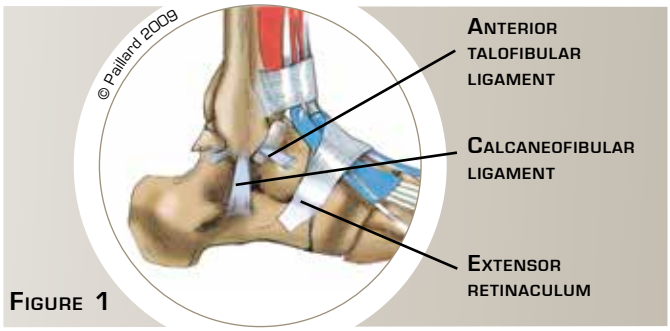


Figure 1

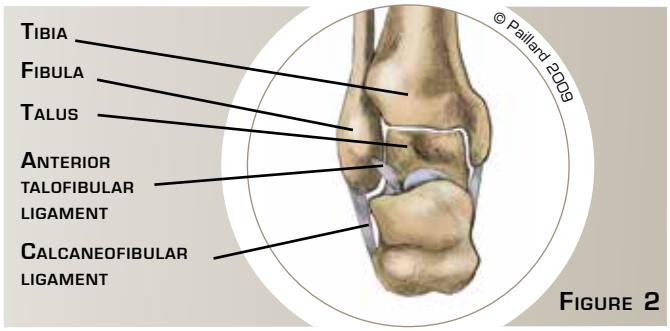


Figure 2

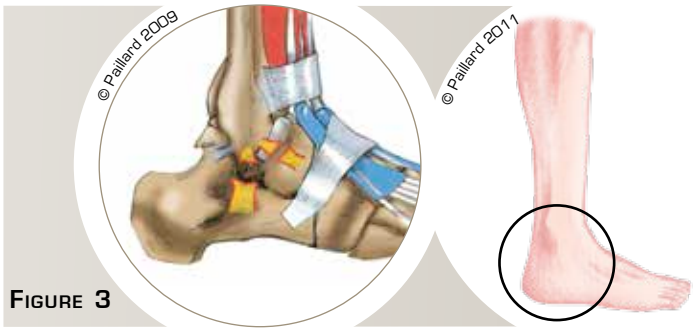


Figure 3

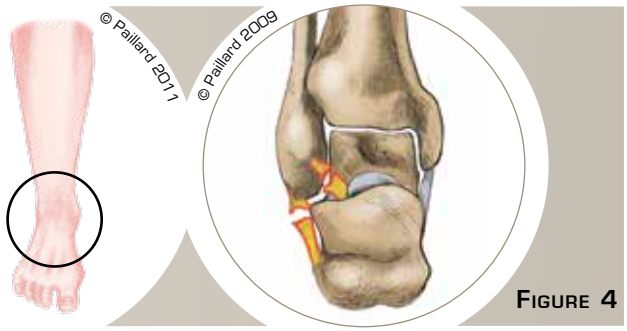


Figure 4

Why an operation?

Some sports or daily activities are impossible in the absence of effective external lateral ligaments, and can lead to instability accidents and cause cartilage damage. In this context, the natural progression is the gradual deterioration of the joint.

The objective of the reconstruction is to recover a perfectly stable ankle to be able to carry out all types of activities, thus preventing cartilage damage and the deterioration of the joint.

What is ankle ligament reconstruction?

Ankle ligament reconstruction consists in reconstructing the anterior talofibular ligament and the calcaneofibular ligament of the external lateral ligament.

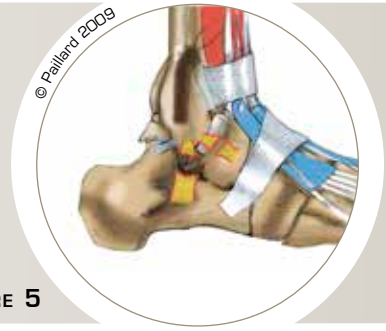


Figure 5

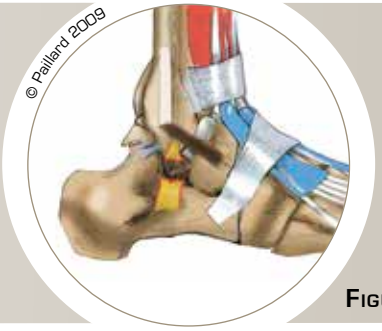


Figure 6

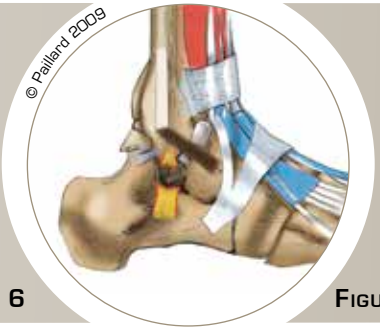


Figure 7

An incision is made on the lateral side of the ankle.

A strip of periosteum, which is the membrane covering the bone, is harvested on the fibula. It is pulled down and inserted in the tip of the fibula at the proximal insertion of the anterior talofibular ligament (figure 5). An anchor is screwed to the talus at the insertion of the distal end of this ligament.

The threads on the anchor are passed through the free end of the strip and tied together to fix it to the bone. This reconstructs the anterior ligament of the external lateral ligaments (figure 6).

Part of the extensor retinaculum, which maintains the toe tendons, is harvested.

It is turned up and inserted in the calcaneus at the distal insertion of the calcaneofibular ligament (figure 7). An anchor is screwed to the tip of the fibula at the proximal insertion of this ligament.

The threads on the anchor are passed through the free end of the strip and tied together to fix it to the bone. This reconstructs the calcaneofibular ligament (figures 8 and 9).

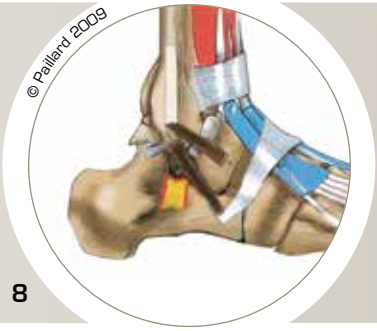


Figure 8

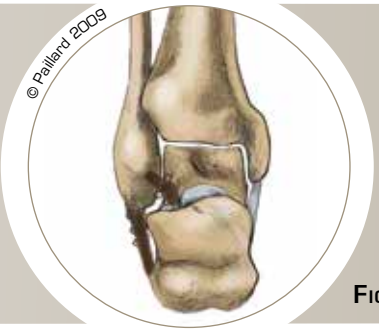


Figure 9

The operation lasts about 1 hour, and requires around 3 days in hospital. This operation is carried out under regional or general anaesthesia. Your anaesthesiologist will decide with you the best type of anaesthesia according to your state of health.

After the operation, your foot will be put in a brace then a resin cast. The pain will be managed and monitored very closely during the post-operative period, and the treatment will be adjusted accordingly.

Post-operative rehabilitation and return to activities

You will wear the resin cast for 6 weeks. You will have crutches to help you move around throughout this period, putting no weight on your foot.

You can put weight on your foot once the cast is removed. You will then start your rehabilitation at your physiotherapist's. Normal walking is recovered at the end of the 2nd month.

Driving and returning to work can be envisaged in the 3rd month, depending on your profession; office work can be sooner.

You can resume gentle sports activities like cycling and swimming after the 3rd month. Running can be envisaged after the 4th month. It may be necessary to wait until the 6th month before a return to team sports and competition.

What are the risks and complications?

In addition to the risks associated with any surgery and the anaesthetic, there are some risks specific to this surgery:

The skin may not heal well and require nursing care for several weeks, or even surgical revision.

The occurrence of an infection, although rare (risk below 1 % in our establishment), is a serious complication and may require surgical revision and a course of antibiotics.

A haematoma may appear around the area operated on due to bleeding. According to the extent of the bleeding, drainage may be necessary.

The nerves and arteries around the ankle may be damaged accidently. This exceptional complication may cause pain, loss of feeling and even paralysis of certain parts of the foot. In the event of arterial damage, vascular surgery may be necessary.

Small blood clots can form and block the veins in the legs resulting in phlebitis, which will require an anti-coagulant treatment for several weeks.

Joint stiffness can develop if the post-operative rehabilitation is not carried out properly.

Exacerbated inflammatory reactions can result in adhesions and limit ankle mobility. However, new treatments exist that can help manage this rare complication more easily.

This list of risks is not exhaustive. Your surgeon can provide you with any additional explanations and will be available to discuss the advantages, disadvantages and risks of each specific case with you.

What is the expected outcome of the operation?

La disparition des douleurs et des sensations d'instabilité est très rapide après l'opération. La récupération complète de la mobilité et de la force musculaire survient en général entre 3 et 6 mois.

L'état des muscles est un élément majeur à considérer avant de pousser la cheville à sa limite, en particulier dans le sport. Le ligament remplacé n'est pas meilleur que le ligament d'origine et une nouvelle rupture peut toujours survenir. Il faut donc rester vigilant face aux risques que représentent les sports sollicitant la cheville.

Les résultats de cette technique sont néanmoins très encourageants puisqu'on retrouve une cheville stable avec une amélioration de la fonction dans plus de 90% des cas. Le risque de dégradation cartilagineuse est moins important sur une cheville stable.

Texts Dr Philippe Paillard

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ARTHROSCOPY, JOINT REPLACEMENT, SPORTS SURGERY

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