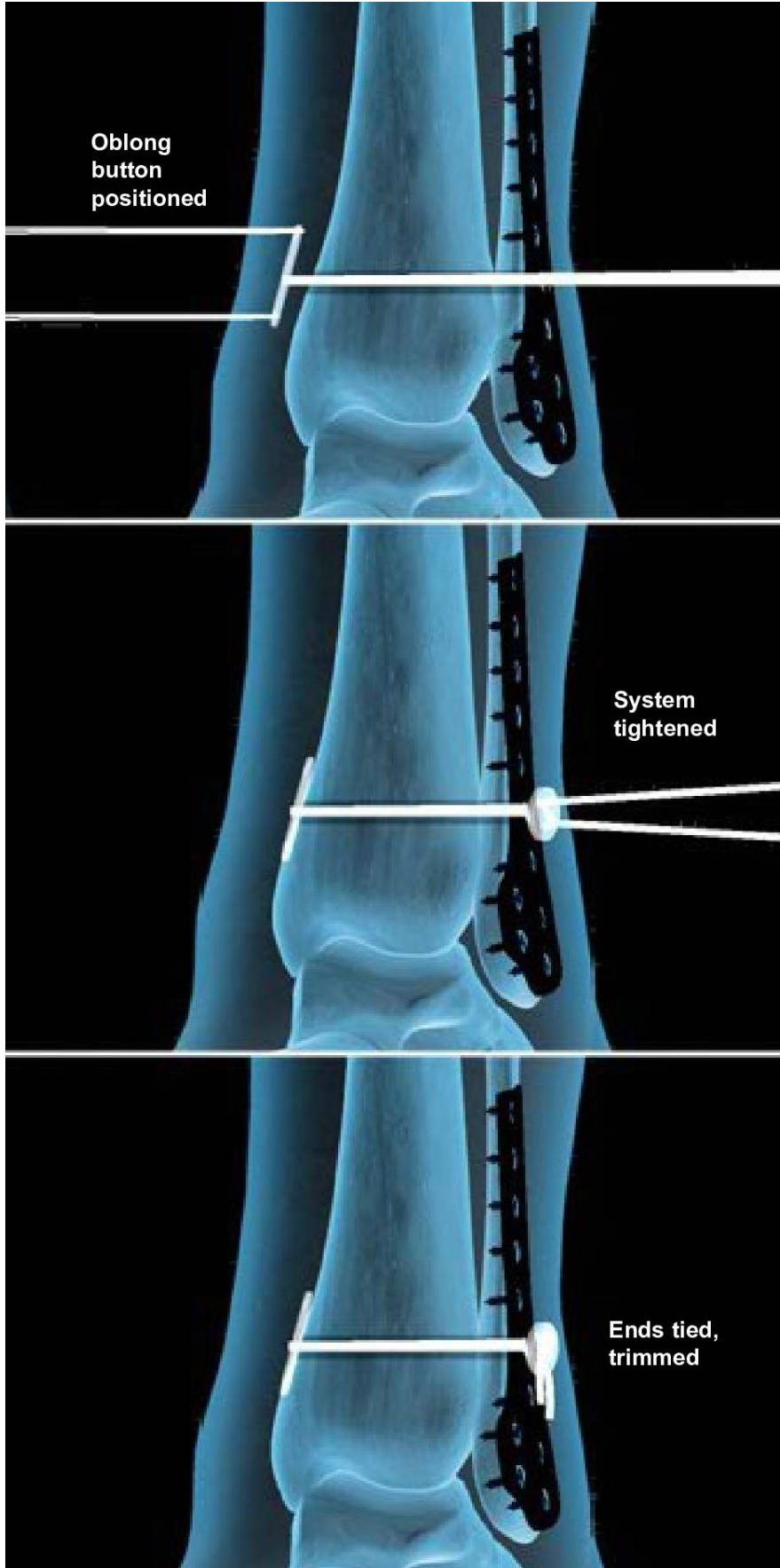




TightRope™ Fixation for Ankle Syndesmosis



Overview

This technique is used to stabilize an ankle after injury. It can be used to repair a high ankle sprain, which damages the soft tissue structures between the tibia and fibula and causes these bones to separate. It can also be used to stabilize a fracture of the fibula. The TightRope system anchors the ends of the tibia and fibula together with a braided polyethylene cord, rather than with a rigid surgical screw, to restore the original position of the bones and to allow for proper healing.

Preparation

In preparation for the procedure, the patient is positioned and anesthetized, and the surgeon makes an incision on the outer side of the ankle to access the joint. If bony fragments have broken loose from the fibula, they are either removed or stabilized, and if the fibula has separated, the pieces are realigned.

Repairing the Fibula

The surgeon typically repairs the fibula by attaching a fixation plate. This plate is held in place by surgical screws. After the fibula has been stabilized, its relationship to the tibia can be restored and reinforced with the TightRope system.

**TightRope™ Fixation for Ankle Syndesmosis****Inserting the TightRope**

With the aid of a guidewire, the surgeon drills a tunnel through one of the lower holes of the fixation plate, through the fibula and all the way through the tibia. The surgeon passes the oblong TightRope button, threaded with the TightRope cord, through this tunnel. Once it has cleared the tibia, the oblong button is pulled back toward the tunnel. This causes it to swivel and lay flat against the tibial bone.

Anchoring the Bones

The surgeon pulls the ends of the TightRope cord to tighten the system, drawing a second metal button against the fixation plate on the fibula. A small knot is tied to secure the system, stabilizing the joint. If additional stability is needed, the surgeon may choose to drill a second hole and place a second TightRope.

End of Procedure and Aftercare

When the procedure is complete, the incisions are closed and the ankle is placed in a splint. Typically, the patient will not be able to bear weight on the ankle for six to twelve weeks, depending on surgeon preference. Once the doctor has determined that the ankle has healed properly, the patient can begin rehabilitation. Unlike the traditional screw syndesmosis reduction, the patient will typically not need to have the hardware removed before returning to unrestricted athletic activity.