

# FINGER PULLEY RUPTURE IN JUDO

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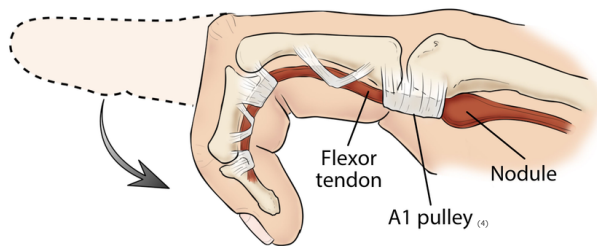
PORTUGUESE JUDO FEDERATION



## 1

### WHAT IS A PULLEY?

Pulleys act as a **ligamentous strap** in order to create an optimal line of pull for finger flexion.<sup>1,2,3</sup>



## 2

### WHY ARE PULLEYS SO IMPORTANT FOR JUDOKAS?

The pulleys allow us to fractionate movement at the fingers and selectively flex the proximal or distal interphalangeal joint to **allow the judoka to grip**. Without the pulleys, the tendon would pull away from the joint during flexion, **compromising grip strength, as well as finger and hand function**.<sup>1,2,3</sup>

## 3

### HOW DO I KNOW IF A PULLEY IS INJURED?



➡ The absence of these pulleys can lead to bowstringing of the flexor tendons, resulting in **disproportionate pain** (usually around or near the injured pulley), **restriction of finger movement, loss of strength, swelling**, and in most severe cases, a **popping sensation**.<sup>1,2,3</sup>

➡ Finger injuries are common in competition, often as a result of **grappling, throwing, or attempted throwing**.<sup>1,2,3</sup>

## 4

### WHAT SHOULD I DO IF I SUSPECT A PULLEY INJURY?

If a diagnosis is suspected, the athlete should be examined by a medical doctor and additional diagnostic tests should be performed (X-ray, ultrasound or MRI, when necessary).<sup>1,2,3</sup>

Early detection allows for timely treatment and prevents the development of sequelae with functional impact on finger flexion and grip strength.<sup>1,2,3</sup>

## 5

### HOW DO I TREAT THESE INJURIES? CAN I PREVENT THEM?

Most injuries are treated **conservatively** using a variety of **taping techniques** (see QR code below).

**Surgical treatment** is only considered in severe cases and recovery can take up to **6 months**.<sup>1,2,3</sup>

Injuries can be prevented through **regular finger training**, including **proprioceptive exercises** (e.g., child's pose finger lifts, static stretching), and **proper fall and throwing technique**. The **quality of the mat** also plays a role in influencing finger injuries. **Taping with special attention to the proximal interphalangeal joint** is a simple measure to successfully prevent skin tears and sprains.<sup>1,2,3</sup>



**Taping plays an important role in the prevention and recovery of finger injuries in judoka.** Therefore, it is important to recognize the warning signs of a serious injury in order to seek specialized assistance and understand the proper application of functional immobilization techniques, whenever appropriate and necessary.

