I RUPTURED MY ACHILLES TENDON: SHOULD I HAVE SURGERY?

All information in this decision aid should be discussed with a health professional (e.g. doctor, surgeon, physiotherapist). Using this decision aid will help you make the best decision for you.

Who should read this decision aid?

This decision aid is for people who have a ruptured Achilles tendon and are considering Achilles tendon repair surgery.

Achilles ruptures happen when the two ends of the tendon are completely separated, often because of playing sport or quickly changing direction.

This decision aid can help you discuss your treatment options with a health professional and help you decide which best suits your values and needs. There will be people whose situation is better suited to non-surgical management. Others will be more suited to surgery. A health professional can help you explore these options and understand if this applies to you.

What are the treatment options covered in this decision aid?

Non-surgical management

You avoid surgery and instead, begin rehabilitation straight away (see below). Starting rehabilitation straight away is crucial for lowering the risk of long-term issues and the need for surgery later.

Surgery

This needs an admission to hospital and a general anaesthetic. The surgeon will make a small cut at the back of your ankle. The two ends of the tendon are then reattached using stitches. You then start rehabilitation (see below).

Rehabilitation is essential and the same for both options (non-surgical management and surgery)

Rehabilitation involves the following:

0 to 3 months

- To protect the tendon in the early stages of healing, you either wear a:
  a) cast in a 'toes down' position or
  b) walking boot with a heel lift all the time
- Most surgeons prefer using either a cast or a boot. Even when a cast is used initially, it is usually replaced with a boot after 2 weeks
- You cannot take weight through your foot for a minimum of 2 weeks and must use a walking aid
- The height of your heel lift is gradually lowered over the first 8 weeks
- You begin wearing the boot less after 8 weeks and start a home-exercise program set by your physiotherapist where you gently move and strengthen the ankle

3 to 6-9 months

- Complete a more intense home exercise-program to further strengthen and stretch the leg and ankle
- Gradually return to work by about 4 months and/or sport by 9 months

The length of each stage of rehabilitation is influenced by the type of activities you want to return to, your general health and the assessment of your healthcare team.
Comparing benefits between non-surgical management and surgery

Key messages
- Most studies suggest there is no difference in ankle function, time to return to sport and/or work, and muscle strength between options.
- Studies include people from the general population (17-86 years of age).
- One moderate quality study suggests patients return to work 7 weeks earlier with surgery.
- Some orthopaedic surgeons say surgery is essential when there is a 'large' distance between the two ends of the ruptured tendon.

Comparing harms between non-surgical management and surgery

Harms are more common among people with other health conditions (e.g. diabetes, heart disease), people who smoke, and people who don't follow healthcare instructions (e.g. bracing, wound care). We can't predict if you will be one of the people who is harmed.

Non-surgical management
- 4 people per 100 treated will re-rupture their Achilles tendon by 2 years
- 2 people per 100 treated will have complications over 2 years, such as poor ankle function

With Surgery
- 2 people per 100 treated will re-rupture their Achilles tendon by 2 years
- 5 people per 100 treated will have complications over 2 years, such as serious surgical complications (infection, nerve injury) and poor ankle function

Further information:
A - From a high-quality review of 29 studies (of over 15000 people) that compared non-surgical management and surgery after an Achilles tendon rupture (Ochen et al. BMJ 2018;364:k5120).
### Summary of benefits, harms, and other practical issues

#### Non-surgical management

- **Potential benefits**
  - Avoid surgery and its possible complications

- **Potential harms**
  - Slightly (2%) greater risk of re-rupture
  - Taking your foot out of the boot during the first 2 weeks of non-surgical management may be more harmful than surgery because there are no stitches holding the tendon together

#### Surgery

- **Potential benefits**
  - Slightly (2%) lower risk of re-rupture

- **Potential harms**
  - Risk of surgical complications that may be serious
  - Costs may be high

**For either option** you will have initial limitations in ankle movement and strength, putting weight on your foot, ability to work and drive. You won’t return to full movement, strength and function for at least 6–9 months. Full recovery is not guaranteed.

### Questions to consider when talking with a health professional...

- Is surgery suitable for me considering my medical, financial, insurance and personal circumstances?
- Can I delay the decision about whether to have surgery? Will this have any consequences?
- Do I know enough about the benefits and harms of non-surgical management and surgery to make an informed decision?
- Am I aware that the length of rehabilitation is the same for each option?
- Will one option be more likely to let me perform particular activities many years from now?
- Does one option make me more likely to return to my pre-injury level of sport?

**Disclosure:** The National Health and Medical Research Council (NHMRC) provided funding to develop this tool but had no involvement in the development process. The developers of this decision aid include orthopaedic surgeons, physiotherapists and behavioural scientists, who have a range of views on the information in this decision aid. 7/9 developers have a PhD. None of the developers will gain or lose anything based on the choices that people make. Feedback from people with Achilles tendon ruptures and health professionals practicing in various clinical settings was used to refine the information presented in this decision aid. The average readability across each section of this decision aid according to the Flesch–Kincaid Grade Level is 10.5.

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