Ruptured Tendon Treatment

Self-Care at Home

All ruptured tendons, regardless of site, follow standard RICE (Rest, Ice, Compression, Elevation) home therapy procedure as you seek medical attention.

- Resting the affected extremity
- Ice application to the affected area
  - Apply ice in a plastic bag wrapped in a towel or with a reusable cold pack wrapped in a towel.
  - Applying ice directly to skin because may lead to further damage if left on for a prolonged period of time.
- Compression of the affected area to minimize swelling
  - Apply compression by loosely wrapping the affected area with an ACE bandage.
  - Be sure that the bandage does not cut off blood flow to the area in question.
- Elevation of the extremity if possible: Try to keep the area above the level of your heart to minimize swelling.
- It is recommended that the quadriceps rupture should be immobilized in an extended (straight knee) position and that biceps rupture should be immobilized in a sling with the elbow bent at 90°.

Medical Treatment

- Quadriceps
  - Partial tears may be treated without surgery by placing your straight leg in a cast or immobilizer for 4-6 weeks.
  - Once you are able to raise the affected leg without discomfort for 10 days, it is safe to slowly stop the immobilization.
- Achilles tendon
  - Treatment without surgery involves placing your foot so that the sole of the foot is pointed downward for 4-8 weeks.
  - This treatment has been advocated by some because it gives similar results to surgery in motion and strength. The problem with this treatment is that it has a rerupture rate of up to 30%.
Nevertheless, it may still be a reasonable option for those who are at increased operative risk because of age or medical problems or inactive people who may tolerate mild weakness in supporting weight on the ball of your foot (called plantarflexion).

- **Rotator cuff**
  - The rotator cuff is unique because treatment without surgery is the treatment of choice in most tendon injuries. More than 90% of tendon injuries are long term in nature, and 33-90% of these chronic rupture symptoms go away without surgery.
  - In contrast, acute rupture, as occurs with trauma, may or may not be repaired surgically depending on the severity of the tear.
  - If the tear is less than 50% of the thickness of the muscle or less than 1 cm in size, the dead tissue is removed arthroscopically. A small incision is made and a tool called an arthroscope is passed into the joint. Through it, the surgeon can see and remove dead tissue without actually cutting the joint open. The shoulder is then left to heal.

- **Biceps**
  - Most surgeons prefer not to operate on a ruptured biceps tendon because function is not severely impaired with its rupture.
  - Studies suggest that after biceps rupture, only a small fraction of elbow flexion is lost and approximately 10-20% strength reduction in supination (ability to turn the hand palm up). This is considered to be a moderate loss and not worth the risk of surgery in middle-aged and older people.


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