

How to prevent muscle atrophy after knee surgery

Our knees come under a lot of strain during our lifetime, both from day to day use and ad-hoc events that occur. If you have suffered damage or trauma to your knee, your doctor may feel that there is no choice but to consider surgery. Knee surgery can reduce pain, restore the strength of your knee joint and make it possible for you to enjoy better mobility.

There are various types of knee surgery, but one of the most common is known ACL reconstruction. ACL – or anterior cruciate ligament – tears are common, but serious injuries that are common in patients who participate regularly in sports. The procedure involves replacing the damaged ligament with new ACL graft tissue, normally from another part of the patient's body. Other common types of knee surgery include:

- Arthroscopy for trimming a torn meniscus
- Meniscus repair
- Lateral release
- Plica excision
- Microfracture surgery
- Patellar/Quadriceps tendon repair
- Partial knee replacement
- Full knee replacement

Muscle atrophy, also known as muscle loss, commonly occurs as a result of ageing. However, certain types of surgery can exacerbate and accelerate the problem, including knee surgery.

When you have knee surgery, the bulk of this atrophy affects the quadriceps. Better known as your thigh muscles, these consist of four muscles in the front of your leg that enable you to lift your knee. When you have surgery on your knee you need to allow yourself reasonable time to recover, and many people will naturally avoid using their leg and knee while they heal. However, by not using your quadriceps you can start to experience a loss in muscle from the area, and this happens probably much more quickly than you expect.

Obviously, it isn't going to be possible for you to start any high-intensity exercises for some time, but this doesn't mean that you have to be a victim of atrophy. Instead, there are a range of specific exercises, consisting of small movements, that you can do which will help prevent the muscles from wasting.

Exercises to prevent knee atrophy

Shortly after your knee surgery, your surgeon and/or physical therapist will speak to you about the importance of completing exercises to strengthen your quadriceps. Exactly what exercises will be recommended to you may vary between patients. However, most will involve making very small movements that probably seem inconsequential but still stimulate and work the muscles, preventing them from atrophying. A good example of a post knee-surgery exercise is a straight leg raise. This is performed in a seated position and you use your thigh muscles to lift your leg several inches above the ground, holding the position for up to 10 seconds, before lowering and repeating. Even such small, non-impact exercises can help keep muscle atrophy after knee surgery at bay.

It is essential that you complete the physical therapy exercises given to you by your doctor or physical therapist. Not only will these help prevent atrophy, but they will also expedite your recovery and strengthen your joint, enabling you to achieve the best possible outcome from your knee surgery.

If you would like further advice on the best way to avoid muscle atrophy after knee surgery, our experienced and professional team would be delighted to support you. Please contact our offices to speak to us or arrange an appointment.