

Common Post-operative treatment

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Knee Anterior Cruciate Ligament (ACL) repair

This surgery involves reconstruction or repair of the anterior cruciate ligament (ACL) by inserting a graft to replace the ligament. The graft is usually taken from your patellar tendon or hamstring tendon.

For the initial 0-2 weeks, the patient may walk with crutches while the main aim of physiotherapy treatment is to reduce swelling and improve range of motion. Isometric strength work is also started in this phase. Exercises will gradually be adapted by the physiotherapist to start with active range of movement exercises, closed chain exercises and balance exercises. When full pain free range of the knee is achieved, the physiotherapist will incorporate more strengthening exercises.

The physiotherapist will re-evaluate the progress and gradually adapt the exercise program to return to functional status in line with the patients specific goals. The total rehab period can take up to 4-6 months depending on the goals of the patient.

Knee arthroscopy

This surgical technique is used to diagnose and treat problems in the knee. The surgeon will make a small incision to insert a tiny camera (arthroscopy) into the knee to investigate the knee joint. The surgeon will correct damaged tissues if necessary.

The rehab period of an arthroscopy procedure will depend on the findings during surgery. The patient will usually be able to walk full weight bearing after the procedure. Crutches may be used for comfort and pain relief. Initially the knee will be tight and swollen.

The physiotherapist will prescribe an active range of movement program to gradually increase the range of movement in the knee over a 10 day period. The exercise program will be adapted gradually on reassessment to improve knee stability, strength and balance. The rehab period will usually take 6-8weeks depending on the severity of the findings.

Shoulder Arthroscopy

During a shoulder arthroscopy the surgeon will make use of a tiny camera called an arthroscope to examine or repair the tissues of the shoulder joint. The arthroscope is inserted through a small cut in the skin. The surgeon inspects the cartilage, bones, tendons, and ligaments of the shoulder joint. The surgeon will then make 1 to 3 more small incisions to insert other instruments to repair a tear in the muscle, tendon, or cartilage. Any damaged tissue is also removed. This procedure is also useful for diagnosing intra-articular lesions, detachment of the glenoid labrum and rotator cuff tears. In some cases the disorder can be dealt with another surgical procedure at the same time. The rehab period and limitations will depend on the findings during the arthroscopy. Physiotherapy aids to reactivate the scapular (shoulder blade) stabiliser muscles and strengthen the mobilise muscles to improve mobility and function of the shoulder. The rehab program will be adapted and progressed in line with the findings of the arthroscopy procedure.

Shoulder Rotator cuff tear repair

The rotator cuff is four muscles and their tendons that attach the scapula (shoulder blade) to the arm. These muscles and tendons stabilise the bone of the arm in the shoulder joint and assist the shoulder move optimally in different directions. The muscles or tendons in the rotator cuff can tear when they are overused or injured. The tendons of the rotator cuff can also be impinged when there is weakness of the scapula stabilising muscles.

Rotator cuff surgery requires a long rehab period to allow the tissue to heal properly. Initially the arm will be in a sling for 4-6weeks which may cause tightness and weakness. For the next 2 weeks the therapist will provide you with an exercise program that consists of passive and assisted movements below the shoulder level. Therapy will focus on increasing range of movement short of pain. The next phase will require exercise for strengthening and improvement of stability of the shoulder to regain function of the shoulder. The rehab process can take up to approximately 6 months depending on the severity of the injury

Shoulder Acromioclavicalr joint excision (ACJ)

The operation aims to remove the painful and damaged Acromioclavicular Joint (ACJ) without losing stability in the joint. An Arthroscopic Subacromial Decompression (ASD) is often done as part of the procedure if there is a subacromial impingement. The patient will wear a shoulder sling for 2-4 days for comfort. Physiotherapy treatment will provide active-assisted exercises to help mobilise the arm short of pain at first. On re-evaluation the therapist will adjust the exercise program to improve active range of movement, strength and stability in the shoulder. The rehab period will usually take 4-6weeks.

Spinal fusion or Decompression

Spinal fusion is surgery to permanently connect two or more vertebrae in your spine, eliminating motion between them. The surgeon can make use of screws or bones to connect the joints.

Decompression surgery refers to removal of parts of the vertebral joint or disc in the spine to decrease pressure and compression of nerves and spinal cord. These procedures are usually done

when there is a risk of losing function due to compression of nerves or the spinal cord or due to instability in the vertebral spine.

Neck fusion/decompression

After the procedure the patient will experience swelling in the neck area and may have difficulty to swallow. Movement in the neck will be decreased with tightness of surrounding muscles. The therapist will provide assistance on how to sleep and get out of bed post operatively.

Soft tissue techniques (massage, dryneedling, myofascial release) will be done to improve the mobility of the Brachial plexus and to relief pain and increase range of movement in the neck. Rehab exercises and neural glide exercises will be done to regain strength and function in the arms and to decrease the hypersensitivity of the nerves. The exercises will be adapted gradually in accordance with the patient's needs and lifestyle. The rehab period will depend on the severity of pain and loss of function. In some cases the patient may require an extensive rehab period.

Back fusion/decompression

The type of procedure will affect the contraindications that the patient will need to adhere to for the next 6 weeks. The patient will not be able to sit for a period of 6 weeks if there are no instrumentation inserted or if a part of the disc was removed. The physiotherapist will assist and educate the patient to stand up safely and walk post operatively. Soft tissue techniques (massage, dryneedling, myofascial release) will be done to improve the mobility of the sciatic and femoral nerves and to relief pain and increase range of movement loss. Rehab exercises and neural glide exercises will be done to regain strength and function in the legs and to minimise hypersensitivity of the nerves. The exercises will be adapted gradually in accordance with the patient's needs and lifestyle. Similar to the neck fusion the rehab period will depend on the severity of pain and loss of function. In some cases the patient may require an extensive rehab period.

Hip replacement/ arthroplasty

In a total hip replacement the damaged bone and cartilage is removed and replaced with prosthetic components. This procedure involves many contraindications for the patient. After the procedure the patient will experience pain around the joint area and some weakness. The patient will not be allowed to turn the hip inwards, bend the hip more than 90° cross the leg over the midline. These contraindications can make daily activities of living difficult. The physiotherapist will educate the patient on how to walk, stand up, get in and out of bed, and perform tasks within the limitations of the procedure. An exercise program will be provided in the hospital to start with mobilisation and strengthening. After discharge the therapist will adapt the exercise program to gradually increase range of movement and strength to reach optimal functional abilities. The program will be adjusted according to the patient's individual needs. The rehab process can take up to 6-8 weeks.

Knee replacement/arthroplasty

During a knee replacement procedure the damaged parts of the knee joint are replaced with artificial parts.

The patient will start mobilising on crutches the day after the surgery. Initially there will be a lot of swelling around the knee that causes stiffness and loss of movement in the knee joint. The physiotherapist will provide an exercise program in the hospital to gradually increase the range of bending and straightening the knee and also educate the patient on how to walk, sit, stand up, get in and out of bed and climb stairs. The surgeon will discharge the patient from the hospital as soon as they can walk functionally and bend the knee 90°. From there the rehab program will be adjusted weekly to gradually increase the range of movement and strength in the knee to reach optimal function. The rehab process can take up to 6-8 weeks. Total knee replacements are one of the most successful procedures in all of medicine.

Shoulder replacements/ arthroplasty

In shoulder replacement surgery, the damaged parts of the shoulder are removed and replaced with artificial components, called a prosthesis which can be a half (just the head of the arm bone) or full (both the head and the socket joint) replacement.

Initially after the procedure the arm will be in a cast for 4 weeks. During this time the physiotherapist will provide specific exercises that will be performed twice daily by removing the arm from the sling. Active rotation of the shoulder is not allowed. After the four weeks the physiotherapist will adapt the exercise program to increase range of movement short of pain. After the 6 week period the therapist will provide a strengthening program that would gradually increase the function of your shoulder. The rehab can take between 8 -12 weeks. A normal shoulder replacement can regain optimal function and strength, whereas a reverse shoulder replacement may regain the range of movement but not the full strength. It is important to note that there are different shoulder replacement surgery procedures and it is crucial to keep to the rules and instructions provided by your surgeon and physiotherapist.