
Post-operative Pain Management

Obviously, all surgery causes some degree of pain.

Treatment of pain is divided into:

- Decreasing the factors in your knee that activate pain nerve fiber impulses, which are sent to your brain where the sensation of pain occurs.
- Decreasing your brain's sensitivity to the pain impulses coming from your knee.

Decreasing the factors in your knee that activate pain nerve fibers.

The body and knee have several different types of nerve fibers and each reacts somewhat differently to local trauma. Some are mechanically turned on, such as stretch nerve fibers. They are most sensitive to change. At the knee, these are typically associated with motion and the stretch related to swelling.

1. As change is the key, gentle motion started early is actually less painful in the long run compared to keeping the knee motionless. This does not mean to aggressively move the knee, but rather gently move the knee from full extension (leg completely straight) to comfortable flexion (knee bent) as allowed by your physician. Many times a knee immobilizer is used to protect the knee when up and about, but when resting seated or reclining, the brace may be removed to allow gentle movement (as prescribed).
2. Swelling stretches nerve fibers and activates them. Therefore, cooling and compression aid to diminish swelling and thus help decrease the pain fiber stimulation.
3. The trauma of surgery activates a body repair mechanism. The first phase is inflammation. A moderate amount is normal and needed. The inflammatory process inflames the pain nerves and causes them to be activated very easily. Inflammation may be moderated with select use of anti-inflammatory medications and Omega-3 (fish oils). The type, dose and timing will be tailored to your particular surgery as some procedures may be adversely affected.

Decreasing your brain's sensitivity to the pain.

As you can now see, it is best to prevent as many knee pain fibers from firing as possible. Some pain fibers are always active.

1. Intraoperatively and immediately post-operatively, local anesthetics are often used to block pain fibers from sending signals to your brain. These wear off typically in 6 to 12 hours so it is important to have adequate levels of pain medications in your blood stream. That is, start the medications as soon as possible in the doses prescribed.
2. Most pain medications act at the brain level to decrease the sensitivity to the pain signals reaching the brain. Thus, there is pain, but the brain 'doesn't care' as much. No pain medication gets rid of all the pain, just how it is perceived. A calming environment, meditation and distraction all can contribute to less perception of pain. Likewise, a hectic environment, anxiety, fear and a continuous focus on your knee pain actually will increase the perception of pain.
3. If the pain becomes unbearable, please call the on-call physician. At times, they may be able to recommend altering your medication dosing to improve your comfort. If that is not possible, a visit to the emergency department may allow a pain medication shot or they can arrange for you to meet with an anesthesiologist to discuss a pain block.