

Rapid Recovery Surgery

Rapid recovery surgery is a philosophy incorporating anaesthesia, injections, medications, mechanics and mindset to achieve the fastest recovery possible. It is not yet instant recovery, but that is the ultimate goal we are working towards. It reduces hospitalisation times, and facilitates a faster return to normal activity.

Patient satisfaction after joint replacement surgery relate to achieving preoperative expectations, adequate pain management, and a reasonable hospital experience. A common misconception amongst patients and their families is that joint replacements need to be in hospital for a week or so, and often go to rehabilitation. With education about cutting edge techniques, the majority of patients will see that an earlier discharge can achieve better results, maintain independence, and reduce common complications like blood clots. For the 5% or so patients who are medically unstable or frail, they too can benefit from the techniques with less pain and possibly a shorter length of stay.

The philosophy extends to other surgery including injury management. Taking ankle fractures as an example, historically crutches for six weeks before weight bearing was permitted. With nerve blocks, rigid internal fixation, weight bearing can commence once the wounds have healed (about two weeks) and the joint can be exercised through a range of movement. At six weeks the joint can be “ready to go”. Achilles ruptures, wrist fractures, shoulder surgery, and virtually all orthopaedic treatments benefit from this approach.

Local Infiltration Analgesia

John Repecci introduced the idea of injecting local anaesthetic around joint replacements in 1993, turning partial knee replacement into overnight stay surgery. With total hip and total knee replacement, more complex mixtures were required to control the inflammatory mediators around the joint that caused pain, stiffness and immobility. In 2000, an Australian Anaesthetist- Dennis Kerr, solved this problem. Dennis created an opportunity to change the general or spinal anaesthetic to one less likely to cause nausea, vomiting, or urinary retention.

The contemporary injection mixture combines Naropin (ropivacaine), a long acting local anaesthetic, with both steroid and non-steroid anti-inflammatories (dexamethasone and ketorolac), and adrenaline to keep the mixture in the operative region. For some operations, a wound catheter is left in place to allow a top-up of the local anaesthetic medications. Sometimes this is even done in the recovery room. The technique for the most part allows the patient to mobilise without drips, drains and oxygen tubes. For normal joint replacements, the intention is to be independent by the following morning, hopefully using only a single crutch at that stage, and be discharged to their own home.



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Multimodal medications

Having achieved good immediate pain relief from the surgery, a background of paracetamol, and anti-inflammatories are used to maintain the comfort. If a top-up tablet is required, we prefer Tramal (tramadol) as it has a relatively long acting effect and is mildly relaxing. The first time it is used, we prefer patients to take just one to test that it doesn't cause nausea. Some doctors' worry about Tramal interacting with antidepressants and other medications, but the dose of Tramal we use is low, and unless the antidepressant dose is particularly high, it doesn't seem to cause a problem.

Avoid short acting narcotics & opioids.

Opioids may have a use in cancer pain, and acute severe pain, but should rarely be used alone, and preferably be long acting. Multimodal therapy allows us to minimise the dose, some patients don't need any narcotics. The most common narcotic we use is Norspan 5 (buprenorphine) that is provided as a patch, which we often change after six days, the second patch usually stays on for 10 days and the dose dwindles away to nothing. Many centres use Endone (oxycodone) but we find the peaks and troughs in the pain relief to be unsatisfactory, often contributing to the patient waking during the night with pain. We prefer the simplicity of patches, and where appropriate use a small dose of Tramal as a top up tablet.

Prior to admission

It is best to have the house ready for your return. Hazards around the house such as rugs you could trip on, hoses on the footpath need to be addressed. For those living alone, having a relative prepared to stay the first night is best. Having some meals prepared in advance saves inordinate standing still in the kitchen. We find staying at a relative's or friend house to

be less productive as there is less impetus for you to get up and walk. For those alone, having a friend or relative prepared to visit daily to deliver milk and shopping is wise. It is critical that the discharge plan is known before admission to hospital.

Your medical team and hospital will have assessed you and your circumstances to be confident the discharge plan will work.

Discharge advice

Depending on the operation and patient, individualised advice will be given. For joint replacement patients coming from a distance, we advise them to get out of the car and walk around every hour en route home. Spare dressings and antiseptics might be provided but where possible, the original dressing is left intact. Compression stockings are worn during daylight hours. When not mobilising, it is wise to elevate the legs either on the sofa or for hip replacements on the bed. Getting out of the house at least twice a day is our preference, and actually being active by walking the street, visiting the neighbours, a gentle lap of the nearby oval enhances recovery. If leaving the house alone, take a mobile phone.