

PAIN RELIEF AFTER SURGERY

Postoperative pain can last for days, weeks or even months. The amount of pain you experience depends on the type of operation and varies widely between patients, even for the same operation. There is no doubt that some people have an ability to tolerate pain exceptionally well, but very few of us have the 'high pain tolerance' that we would like to think we have. There are many factors that determine postoperative pain levels including the amount of bleeding or swelling and even simple things like lack of sleep. It is even possible to have the same operation on two separate occasions and find that the postoperative pain is vastly different between the two procedures.

Mr Colvin and the anaesthetist will discuss pain relief issues with you and prescribe painkillers (analgesics) for your stay in hospital and to take home. Whilst most patients prefer not to take medication unnecessarily, we encourage sensible use of painkillers after surgery to facilitate recovery and rehabilitation. If pain prevents you from undertaking the postoperative exercises then it will impact upon the results of surgery.

The objective of postoperative pain relief is not to make you completely pain free, but rather to make the pain manageable.

This information sheet describes some of the painkillers you may be prescribed, how you should take them, and the common side effects.

TYPES OF PAINKILLERS

SIMPLE PAINKILLERS (TAKEN REGULARLY)

1) Paracetamol (Panadol)

Panadol is a very effective and simple painkiller. The usual dose for adults is two tablets (1gm) taken every four to six hours for a maximum of eight

tablets per day. Provided the maximum dose is not exceeded, Panadol is an extremely safe painkiller and has virtually no side effects.

The simple painkillers are best taken regularly to build up a therapeutic dose in your bloodstream. Taking two Panadol with each meal and then two tablets before you go to bed is a good routine.

Panadol is also available as Panadol Osteo which is a slightly higher dose and is meant to be taken as two tablets three times per day (not four times per day).

Aspirin is not a recommended painkiller after surgery as it may cause stomach upsets and bleeding.

2) Anti-inflammatory Drugs

Despite being called anti-inflammatories, this category of drugs is very good for pain relief. There are many different brands. Over the counter anti-inflammatories include Nurofen and Voltaren. Prescription anti-inflammatories include Naprosyn, Brufen, Feldene, Celebrex and Mobic.

Never take more than one brand of anti-inflammatory as it may lead to overdose.

The commonest side effect of anti-inflammatory drugs is indigestion or reflux. Anti-inflammatory should always be taken with food. Celebrex and Mobic are less likely to cause reflux. Celebrex is probably the commonest anti-inflammatory used for postoperative pain.

Anti-inflammatories do not cause drowsiness. Anti-inflammatories can aggravate high blood pressure. They are generally very safe for short term use (up to thirty days). Long term use should be discussed with your general practitioner.

NARCOTIC ANALGESICS OPIATES (TAKEN AS NEEDED)

Most patients will require some form of narcotic analgesic for moderately severe postoperative pain. Here is a list of some of the common narcotic analgesics in use:

1) Panadeine and Panadeine Forte

These drugs are a combination of paracetamol (Panadol 500mg) and codeine. Panadeine has approximately 15mg of codeine per tablet and Panadeine Forte has 30mg of codeine per tablet. Codeine is a narcotic analgesic which will provide stronger pain relief.

The usual dose of Panadeine or Panadeine Forte is the same as Panadol, that is one to two tablets every four to six hours up to a maximum of eight tablets per day. You can interchange Panadol, Panadeine or Panadeine Forte in this maximum of eight tablets. For example, you might take Panadol or Panadeine during the day and Panadeine Forte at night.

Codeine is notorious for causing constipation. A diet high in fibre and maintaining good hydration is preventative, laxatives such as Movicol may be required.

2) Tramadol (Tramal)

Tramadol is a very commonly used drug for moderately severe postoperative pain relief for moderately severe pain. It comes as 50mg immediate release tablets and the usual dose is one to two tablets every four to six hours. It is also available as a slow release preparation that only needs to be taken twice a day.

3) Oxycodone (Endone)

Oxycodone is a very strong painkiller and should be reserved for severe postoperative pain. It is commonly prescribed as 5mg tablets and the usual dose is one to two tablets taken as frequently as every two hours for severe pain but usually every four to six hours. Only twenty tablets can be provided on any one prescription.

4) Targin

Targin is a slow release version of oxycodone which contains a second drug to reduce the risk of constipation. It has the advantage that it is only required to be taken twice a day and with fewer side effects.

5) Tapentadol (Palexia)

This is a newer narcotic analgesic which is a useful option for patients who do not respond adequately to more commonly used narcotic analgesics.

6) Buprenorphine (Temgesic sublingual, Norspan patch)

Buprenorphine comes in two forms. Firstly, it can be used as a tablet placed under the tongue (sublingual). Again, it is used in this form mostly for people who are not tolerating the more common narcotic analgesics such as oxycodone.

It is also available as a Norspan patch which looks something like a large band aid. The drug is absorbed through the skin. This can be a very effective way to provide base line pain relief for more painful surgical procedures and is particularly advantageous in shoulder surgery. The patch is usually put on at the time of surgery but may take up to twelve hours to start working. The patch usually stays in place for five days. Because the drug is absorbed continuously, it provides very reliable pain relief without the highs and lows associated with taking tablets.

If you experience side effects (nausea) from the patch, then it should be removed. However, it may also take twelve hours for the drug to wear off.

7) Morphine, Pethadine and Fentanyl

These are narcotic or opioid drugs which are usually given intravenously through a drip or by intramuscular injection. They are generally only required within the first twenty-four hours of surgery. They may be administered via a PCA (patient controlled analgesia). This device allows you to administer pain relief to yourself with a set maximum dose. A PCA can be a good way to control severe pain in the immediate postoperative period. Unfortunately, because the drugs are so strong, the nurses will need to check your blood pressure regularly overnight which leads to a very interrupted sleep.

8) Pregabalin (Lyrica)

Specifically targets nerve pain. Major side effects are drowsiness and dizziness.

HOW TO TAKE PAINKILLERS

The common analgesic 'cocktail'

Successful pain control is not unlike the healthy food pyramid that underlies a good diet. The food pyramid has large amounts of fruit, vegetables and cereals at the bottom, smaller amounts of dairy and meat in the middle of the pyramid and very limited volumes of oily and fatty foods at the top.

In the same way, Panadol and anti-inflammatories should be considered the baseline of the pain relief pyramid. All patients experiencing postoperative pain should be taking Panadol and if they can tolerate it, anti-inflammatories. These drugs are taken REGULARLY.

The middle of the pyramid is made up of stronger narcotic tablets such as Tramadol, Oxycodone and Targin. At the top of the pyramid come the injectable narcotics such as morphine and fentanyl.

These stronger drugs get added to this baseline AS NEEDED, The strong drugs do not get taken instead of the simple analgesics.

So a common postoperative pain relief 'cocktail' that many patients would take home would be regular Panadol (six to eight tablets per day), an anti-inflammatory like Celebrex (200mg once daily) and Tramadol (Tramal) or Oxycodone (Endone) on top of that as required.

SIDE EFFECTS OF ANALGESICS

a) Reflux

Reflux or indigestion is a common side effect from anti-inflammatory medications. Anti-inflammatories must be taken with food to reduce the incidence of reflux. Two common anti-inflammatories, Celebrex and Mobic, are much less likely to cause reflux.

If there is a history of reflux or peptic ulcer disease, anti-inflammatories can be taken in conjunction with medications such as Losec. However, if

there is a history of severe reflux, oesophagitis or ulceration, anti-inflammatories probably should be avoided.

b) Constipation

All narcotic analgesics will potentially cause constipation. Codeine (Panadeine Forte) is particularly well known for this problem.

Prevention is the best treatment and good hydration and fibre supplementation will assist. Laxatives such as Movicol are often prescribed in conjunction with narcotic drugs and are available over the counter at the pharmacy.

c) Drowsiness, Dizziness, Palpitations

These are generally associated with narcotic drugs.

d) Nausea and Vomiting

This is one of the commonest and most debilitating side effects of narcotics. These side effects do not represent an allergy to narcotics; they are a known side effect experienced by most patients. Unfortunately, some patients are extremely sensitive to narcotics. Severe nausea and vomiting may require the cessation of narcotic analgesics.

For less severe symptoms, prescription medications such as Maxalon and Ondansetron can be given as injections or tablets.

One of the better drugs for nausea is Phenergan which is an antihistamine available over the counter. It causes sedation but that can be advantageous.

Maintain hydration with a sports drink such as Poweraid.

e) Skin itch

Itching is another common side effect of narcotics. Again, it is best treated with antihistamines such as Phenergan.

f) Respiratory depression

Narcotic drugs in general will slow your breathing. In high doses, this can result in respiratory depression or respiratory arrest which is a medical emergency. For this reason, we advise against taking sleeping tablets (such as Temazepam, Stilnox or Restavit) whilst on narcotic analgesics.

g) Tolerance, Addiction and Withdrawal

Taking narcotic analgesics over a prolonged period does lead to a tolerance and higher doses are required to achieve the same effect.

Patients and doctors worry about addiction to therapeutic drugs. Generally speaking, it is not possible to become addicted to analgesics when they are being taken for strong pain. It is most important that these stronger drugs are only taken for a set timeframe. Mr Colvin can advise what is a reasonable timeframe to be on stronger painkillers based on the procedure that has been performed.

If you have been taking narcotic analgesics over an extended period and particularly if you have been taking them before surgery as well as after surgery, then you may experience some degree of withdrawal when coming off the medications. Symptoms of withdrawal can include irritability, anxiety, insomnia, general aches and pains, sweating, nausea, vomiting and diarrhoea. In this situation you will need to wean the dose slowly over a period of time.

PAIN RELIEF FOR SPECIFIC OPERATIONS

1) Knee arthroscopy

Pain relief for day case surgery is generally adequate with a Panadol based drug (Panadol, Panadeine or Panadeine Forte) and an anti-inflammatory. If stronger painkillers are required, it should only be for a few days.

2) Knee reconstruction

The postoperative pain is of moderate severity. A single prescription of tramadol or oxycodone (twenty tablets) is generally adequate for the postoperative pain if combined with panadol and anti-inflammatories.

3) Shoulder surgery

Shoulder surgery can be very painful in the postoperative period and stronger painkillers are almost always required.

Quite often the anaesthetist will perform a nerve block of the shoulder region prior to surgery. This involves local anaesthetic injection into the major nerves of the neck. It produces complete numbness and often paralysis of the shoulder and arm. This means that the shoulder will be almost completely pain free for twelve hours or more.

Unfortunately, the nerve block can wear off quite quickly and pain levels can increase over a short period of time. It is very important that if you feel the nerve block wearing off that you let the nurses know and that you start the tablets early. Any painkilling tablet will take thirty to sixty minutes to work. Occasionally, injections will be required when the block wears off.

Quite often we will use a Norspan patch which looks like a large band aid as part of the pain relief for shoulder surgery. The patch is usually applied to the opposite shoulder region and should be worn for five days. It provides a consistently absorbed dose of narcotic.

Following rotator cuff tendon repair surgery for the shoulder, most patients will require stronger narcotic painkillers such as oxycodone or tramadol for several weeks or months. If still taking narcotic analgesics two months post surgery, they will need to be wound down gradually.



SUMMARY

- Most of us don't like taking tablets but it is important to adequately control your postoperative pain to participate in successful rehabilitation.
- A successful pain relief schedule builds on a baseline of simple analgesics taken regularly (Panadol and anti-inflammatories) and stronger painkillers are added as required to this baseline.
- Some people are extremely sensitive to narcotic drugs and experience significant side effects (nausea, vomiting). It may be necessary to reduce the dose to manage the side effects but unfortunately this will mean tolerating some pain.
- If you are not tolerating the conventional drugs there are newer medications which may be better tolerated and we can change the 'cocktail'.
- The objective of postoperative pain relief is not to make you completely pain free but rather to make the pain manageable.

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