Medication Use in Total Hip and Knee Replacement Surgery

Pharmacy Department
Queensway Carleton Hospital
Medication use in total hip and knee replacement surgery

PURPOSE:
General description of medication use during your hospital stay
Pre-Operative Assessment (POAC) Visit

The visit occurs approximately two weeks prior to your surgery.
Medication Reconciliation

- An accurate list of your current home medication(s) will be compiled by either a nurse or a pharmacy technician.
- The anesthetist will use the information to manage your medication during and after surgery.
- The surgeon will order your home medications for use during your hospital stay.
Medication Reconciliation

Know your allergies / adverse reactions:

- What drug/food caused the reaction?
- What happened?
- When did it happen?
- Can you take other, similar medications?
Medication Reconciliation

Bring all current medication in original bottles or boxes to POAC visit and hospital stay:

- Prescription medications
- Vitamins
- Non-prescription medications
- Herbals
Medication Reconciliation

- A nurse will review your medications and direct you on how to use your medications in the week prior to surgery
- You may need to see an internal medicine doctor before surgery
Post-Operative Issues

- Pain
- Nausea and vomiting
- Constipation
- Blood thinners or anticoagulation
Adequate pain control is important for the recovery process

• It is important to have realistic expectations about pain control after a major surgery

• Pain is most severe right after surgery and should improve thereafter.
Day of Surgery

1. Acetaminophen and an anti-inflammatory 1 hour before surgery.

2. A small dose of narcotic is injected into the spine (intrathecal morphine):
   - effect lasts 16 to 24 hours
   - minimal side effects

3. A small dose of local anesthetic will be used for additional pain control. This is called a nerve block.
Day of Surgery

Anesthetist may order:

- Acetaminophen (Tylenol®)
- Anti-inflammatory
- Pregabalin
- Dilaudid, as needed

Medications will be tailored to your needs
Day of Surgery

Patient Controlled Analgesia (PCA)

- Also known as “the pain pump”
- Start only as needed
- Small dose of a narcotic is infused into the vein via a pump
- Patient self administers within limits set by the anesthetist
Day 1: After surgery

- PCA, if used, is usually discontinued
- Start pain medications ordered by the surgeon
  - Acetaminophen
  - Anti-inflammatories
  - Narcotics, as needed (hydromorphone, oxycodone, codeine)
  - Medications to reduce nerve pain (pregabalin)
Acetaminophen

- Limited side effects
- Last pain medication to be stopped
- Maximum dose is 4 G per day from all sources
- Regular use will decrease the amount of narcotic required.
Anti-inflammatories

Examples:

- Celecoxib or Celebrex®
- Ibuprofen or Advil®
- Naproxen or Aleve®
- Diclofenac or Voltaren®

...and many more.

- Decrease inflammation and swelling
- Can be omitted if you have side effects
Narcotics

Narcotics are often necessary after surgery

- Side effects can be managed
- Use the smallest dose for the shortest period of time
- Continue to use at home - as needed
- Addiction is usually not a problem in short-term use
Remember…

- The amount of pain you feel after surgery varies. It depends on factors such as:
  - severity of osteoarthritis
  - medications used before surgery
  - the surgery itself.

- The amount and type of pain medication needed will vary.

- It is not advisable to stop use of chronic pain medication immediately following surgery. It may be better to wait until you are better and work with your family doctor to taper off chronic pain medication.
Nausea and Vomiting

Can be common after surgery:

- Usually occurs the first 24 hours post-op
- Due to anesthetics and narcotic medications
- Several medications used to control nausea. Ask your nurse.
- Usually not a concern at time of discharge
Constipation

Another common post-operative symptom

- Caused by medications, lack of food, and lack of activity
- Laxatives may be required

There are several strategies to reduce symptoms, *ask your doctor or pharmacist*
Blood thinners after surgery

- Increase risk of blood clot formation in legs after major lower body surgeries.
- Need to thin the blood to prevent blood clots after surgery.

Duration:
- Up to 2 weeks for knee replacement
- 4 to 5 weeks for hip replacement
Blood thinners (anticoagulants)

Injectable:
Enoxaparin (Lovenox®)

Oral:
Apixaban (Eliquis®)
Dabigatran (Pradaxa®)
Rivaroxaban (Xarelto®)
Warfarin (Coumadin®)
For patients on blood thinners before surgery

• Used to prevent blood clot from atrial fibrillation

• Will be stopped before surgery and restarted after surgery

• May need to see Thrombosis Clinic or a medicine doctor for details of stopping and starting the medication
Enoxaparin (Lovenox®)

- Most commonly prescribed
- You will be taught how to self-inject
- Start the morning after surgery
- Continued for two to five weeks post-op
- Covered by Ontario Drug Benefit
- No need for lab monitoring
Oral Anticoagulants
(Apixaban, Dabigatran, and Rivaroxaban)

• Can be used to prevent clot after surgery
• Not routinely used due to lack of reliable reversal in the event of a bleed
• Ask your Surgeon if you are interested
Post-Operative Tips

• Contact your surgeon if there is increased pain or swelling in the operated joint.

• Ask your dentist if you need antibiotics before dental procedures
One last thing before you come in for surgery ...
Home Medications

Bring all home medications on day of surgery

- Update any changes to medications by informing nursing staff
- Use your own medications if not available at QCH
Questions?