Clinical Pharmacists

- Review medication orders
- Address drug interactions or dosing problems
- Resource for you, doctors, nurses, and the rest of the team.
- May visit you to talk about
  - Pain management
  - Anticoagulation ("blood thinning") medication
  - Medication side effects
- Please ask for a pharmacist visit.

Talk to your doctor before surgery

- What medications to stop before surgery – some need to be stopped 5-10 days before surgery
- When to stop eating and drinking
- What medications and doses to take or skip
  - The night before and the morning of surgery
  - Take with small sips of water
- After surgery your doctor may stop or adjust some medications and/or add new ones
- Any questions? - Ask your doctor, nurse, or pharmacist

Medication/Supplement List

- Current
  - Include vitamins, nutritional supplements, and herbal supplements
- Complete
  - Doses and how many times per day
  - What times of day
  - Ex: Instead of "10 mg a day", say "5 mg twice a day with breakfast and dinner"

Personal medications

- The hospital has most medications or their appropriate substitutions
- Most of the time there is no need for you to provide your own medications
- But occasionally we may have to ask you to provide a medication that we may not have available.

Antibiotics before Dental Procedures

- After surgery for the rest of your life you will need to ask your dentist for preventative antibiotics before any dental procedures.
- This includes cleanings.
- This is to prevent mouth bacteria from entering the bloodstream, traveling to the joint replacement, and infecting it.

Allergy/Side Effect List

- Medications
- Herbal or Nutritional Products
- Foods
- Include specific reactions/side effects
- Examples:
  - Hives with amoxicillin
  - Nausea with codeine
Taking pain medicine helps you:
- Reduce pain and increase comfort
- Sleep/rest better – promotes healing
- Get more out of physical therapy
- Increase physical activity
- Recover faster

The Pain Scale
How severe is your pain?
- Scale of 1 to 10, where level 1 is very mild and level 10 is the most severe pain.
  - Levels 1-3 are mild pain levels
  - Levels 4-6 are moderate pain levels
  - Levels 7-10 are severe pain levels
    - 10 is the most severe unbearable pain

Pain Scale

Other ways to describe pain
- More detail is better
- Where is it?
- Is it irritating, mild, moderate, severe, very severe, or unbearable?
- Does it travel or radiate?
- Is it throbbing or is it constant?
- Is it sharp or dull?

Pain Medicines
- Opioid (opiate, narcotic) pain medications
  - See later slides
- Non-opioid
  - Tylenol (acetaminophen)
  - Toradol (ketorolac) injection
  - Motrin (ibuprofen) tablets
  - Celebrex (celecoxib) capsules
  - For mild to moderate pain
  - Can be added to opiates to help relieve moderate to severe pain

Side Effects of Medication
- We want all of our patients to be aware of possible medication side effects
  - Please report any suspected side effects.
  - If serious, push the call button immediately
  - Please review the handout, “Commonly Prescribed Post-Orthopedic Surgery Medications and their Side Effects”
Side Effects of non-opioid medications commonly prescribed after surgery

- Acetaminophen (Tylenol) – none usually
- Side Effect Management – may take with or without food
- Docusate Sodium (Colace) – stomach cramping or diarrhea
  - Side Effect Management – Drink plenty of water. Take at night. Stop if diarrhea or discomfort.

Opioid pain medication

- Dilaudid (hydromorphone)
- Morphine
- Oxycodone
- Demerol (meperidine)
- Ultram (tramadol)
- Percocet (oxycodone plus Tylenol)
- Norco, Lortab, Vicodin (hydrocodone plus Tylenol)
- Codeine (plain or with Tylenol)

Possible side effects of opioid medicines

- Sleepiness/Drowsiness/Light-headedness
- Dizziness/Trouble balancing
- Confusion
- Slowed breathing
- Changes in vision
- Difficulty urinating
- Itching and/or Rash
- Constipation

Side Effects: how to deal with opioid side effects

- Push call button and tell your doctor or nurse
- Taking pain medicine with food, if ok with your doctor, can reduce stomach upset or nausea
- Drink plenty of water, if okay, to avoid constipation. Take a stool softener.
- Sit up, stand up, or sit down slowly to avoid dizziness or falling down
- After discharge –
  - Avoid alcohol - it increases side effects
  - Know how medicines affect you before driving

Medications available to treat side effects

- Medicines to treat common side effects are available, often pre-ordered
- Maalox for Stomach upset
- Zofran (ondansetron) or Reglan (metoclopramide) for nausea or vomiting
- Dulcolax (bisacodyl), Milk of Magnesia, or Colace (docusate), for Constipation

How are pain medications given?

- By mouth (oral)
- Injected
  - In the vein (intravenous)
  - In the muscle (intramuscular)
  - In the skin (subcutaneous)
  - In the rectum (rectal)
How long does it take to work?

- Injected medication takes 5-15 minutes
- Swallowed medication takes 15-60 minutes
- Rectal medication takes 30-60 minutes

- Take pain medicine before pain gets too severe.
- Otherwise it may not work as well
- Take pain medicine before physical therapy or exercise
- Plan for enough time for them to work
- Oral medication takes longer

Anticoagulants (Blood Thinners)

- Prevent blood clots
- Lovenox (enoxaparin) injection
- Heparin injection
- Coumadin (warfarin) tablets
- Eliquis (apixaban) tablets
- Pradaxa (dabigatran) capsules
- Xarelto (rivaroxaban) tablets

Anticoagulant monitoring

- Blood tests are needed to monitor and adjust the doses of some anticoagulants
- Automatically done while you are in the hospital and at a subacute (rehabilitation) care facility
- At home be sure to promptly get any lab tests according as needed or scheduled

Anticoagulant Side Effects

- Bleeding from eyes, gums, or nose
- Blood in stool, urine, or vomit
- Dark or black stool
- Vomiting material that looks like coffee grounds
- Coughing up blood
- Unusual bruising

Thank you!

- Any questions?
  - Anticoagulants? Opiates? Other pain medicines?
  - Addiction? What to discuss before surgery?
  - Allergies? Side Effects? Any other questions or concerns?

- Pharmacists are available for you.
  - May visit you
  - Will answer any medication questions

- Thank you!