# **Orthopedic Services**

Pre-Operative Joint Replacement Class





### Pre-Op Joint Replacement Class Agenda

### Welcome

Introduction and watch orientation video.

### PowerPoint Presentation – Part 1

• Review of joint replacement surgery, risk and benefits of surgery, and discuss "Getting Ready for Surgery" including equipment considerations.

### <u> PowerPoint Presentation – Part 2</u>

- What to expect for surgery (day before, day of surgery, during your hospital stay, and day of discharge).
- Review exercises for you to practice.
- Talk about additional considerations following your joint replacement surgery.

### PowerPoint Presentation – Part 3

- Q&A discussion
- Additional resources and important numbers
- References

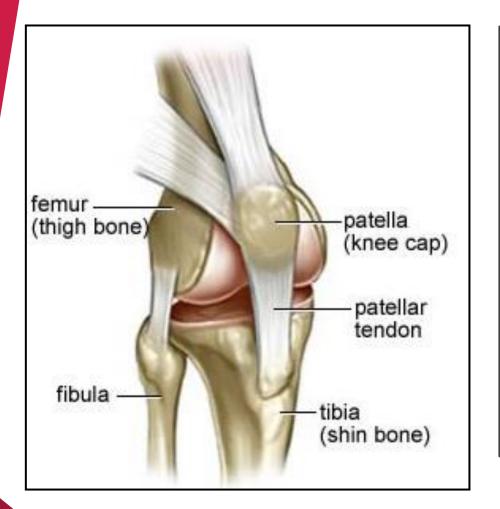




# **Orientation Video**

Joints Videos | Southern California Hospital (uscarcadiahospital.org)

# Your Knee Joint (hinge-type joint)



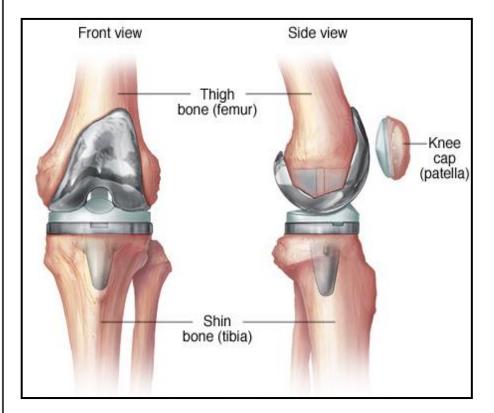
- This joint is formed where the femur (thigh bone) meets the tibia (shin bone).
- Cartilage covers the surface of these bones, acting as a cushion.
- When the cartilage of the knee joint breaks down (whether from trauma, age, or disease) it becomes painful and can interfere with normal daily activities.
- Reasons for surgery include having continuous severe pain with no relief by other treatment (medications, injections, therapy), decreased movement and/or can't perform normal daily activities.





# **Knee Replacement Surgery**

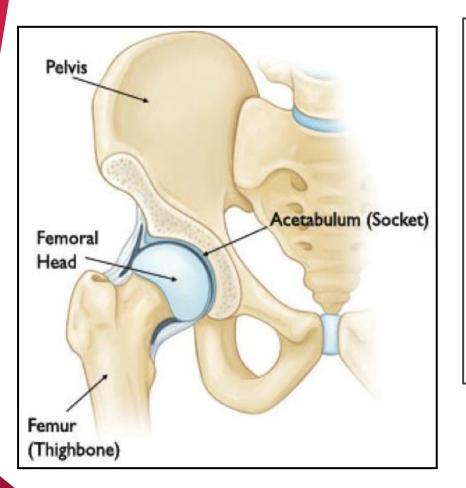
- During surgery, the knee is in a bent position to show all the surfaces of the joint.
- A midline incision will be made along the front portion of the knee (about 5-8 inches).
- Damaged areas are resurfaced (repaired) and replaced with a prosthesis (artificial joint). Usually made from a combination of synthetic metals, ceramics, and hard plastic materials.
- The surgery takes approximately 2 hours to complete.





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# Your Hip Joint (ball-and-socket joint)



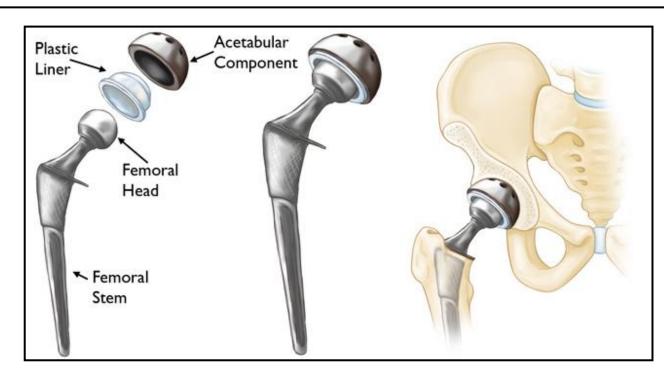
- This joint is formed where the femur (thighbone) meets the pelvis (wide curved bone).
- Cartilage covers the surface of these bones, acting as a cushion.
- When these areas of the hip joint break down (whether from trauma, age, or disease) it becomes painful and can interfere with normal daily activities.
- Reasons for surgery include having continuous severe pain with no relief by other treatment (medications, injections, therapy), decreased movement and/or can't perform normal daily activities.



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# Hip Replacement Surgery

- Damaged areas of the joint are resurfaced and replaced with an artificial joint (prosthesis) made from a combination of synthetic metals, ceramics, and hard plastic materials.
- There are different surgical approaches to hip replacement surgery. Depending on the technique practiced by your surgeon, you may have an incision on the front, back or side of your hip.







# **Hip Replacement Techniques**

- Posterior Approach (incision is on the side of the hip, behind hip joint)
  - Most common approach in the United States.
  - Patient is positioned on their side during surgery.
- Anterior Approach (incision on front)
  - Newer approach that can be performed in certain cases.
  - Patient is positioned on their back during surgery and incision is made on the front to reach the hip.
- Lateral Approach (incision is on the side of the hip)
  - Much less common approach.
  - Larger muscles are cut using this technique.





# **Benefits and Risks of Surgery**



### **Benefits**

- Relief of severe pain
   Infection
- Increased mobility
- Resume normal daily activities
- Blood Clots in the leg veins or lungs
  - Pneumonia

**Risks** 





### **Risk Prevention**

### Infection

- Hand washing (at least 20 seconds using antibacterial soap or an alcohol-based cleanser)
- Quit smoking \*at least one month before & after surgery
- Manage diabetes\*
- MRSA/COVID screening at pre-admit testing appointment
- Correct application of CHG wash on the night before and the morning of surgery
- IV antibiotics will be administered before and after surgery
- Contact your doctor right away if any of the following occur:
  - Fever greater than 101.6 F (38.3 C) or chills
  - Increased or foul-smelling drainage from incision
  - Increased pain at the site of joint replacement



### **Blood Clots**

- Application and compliance of SCDs (sequential compression device) during hospital stay
- Exercise and mobility before and after surgery will decrease your risk of blood clot formation
- Most patients will be prescribed a blood thinner after surgery for up to 30 days
- Contact your doctor immediately if any of the following occur
  - Pain, excessive tenderness or redness in your leg or calf
  - Swelling in your foot, ankle, calf or thigh
- Call 911 immediately if you experience any of the following, as they may be signs of a clot that has moved to your lungs which is a medical emergency
  - shortness of breath
  - chest pain
  - coughing up blood
  - unexplained anxiety



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10

### **After Surgery Zones**

Please use this handout as a reference after your surgery to know when to call your surgeon or when to call 911. The earlier you get help, the better! For specific questions or concerns, contact your surgeon.

Surgeon's name and number: \_

#### The green zone: Good

#### What the green zone means:

- Your symptoms are under control with no new symptoms in the yellow or red zones.
- You are continuing your daily activities as instructed by your doctor and/or therapist.
- You are taking your medications as ordered with no side effects.
- You are scheduled for a follow-up appointment with your surgeon.

#### The yellow zone: Caution

Call your surgeon right away (then your primary doctor if there is no answer from your surgeon) when you have the following symptoms:

- Increased swelling, warmth, tenderness, or pain in your foot, ankle, calf or thigh.
- Your incision starts to open or continues to bleed.
- Warmth, redness, swelling, oozing, and/or a bad or strong smell at the incision.
- Consistent fever more than 101.6° F (38.7 ° C) and feeling more weak or tired than usual.
- Increased pain you can't tolerate even after taking pain medication.
- A cough and have trouble breathing.
- Constipation lasting more than three days.
- Feeling like you need to pee a lot and noticing burning and/or blood in your pee.
- Anything else that bothers you and is not normal for you.

What the yellow zone means: your symptoms may mean you need to see your surgeon as soon as possible.

#### The red zone: Emergency

Call 911 immediately if you have any of the following symptoms in the red zone:

- Sudden cold sweat and/or chest pain/tightness spreading to the arm, shoulder, neck, or jaw.
- Sudden shortness of breath that doesn't get better after rest and/or coughing up blood.
- Having unclear thoughts, unexplained anxiety, or stroke symptoms.
- Feeling dizzy and like you are going to pass out.
- Having a very high fever with chills, cold/clammy skin, shivering, and very fast heartrate.
- Excessive bleeding that won't stop from your surgical site even after applying pressure.

#### What the red zone means: you need to call 911 right away!



### **Risk Prevention**

#### Falls

- Do NOT get out of bed while in the hospital without a USC Arcadia Hospital orthopedic team member assisting you.
- At home secure all area rugs, electrical cords, and pets that may interfere with your ability to walk safely.
- Have a handyman install safety rails on stairways or in the bathroom to assist with activities that could increase your risk for falls.

#### Pneumonia

- Using an <u>incentive spirometer</u> can help to prevent pneumonia
- The incentive spirometer will be given to you after surgery when you arrive to the unit.
- The goal is to use your incentive spirometer 5 10 x per hour, while awake.
- Begin practicing at the hospital after surgery and continue after discharge following your joint replacement surgery.

- Dislocation (depends on the surgery performed)
  - Follow the knee/hip precautions taught to you by your therapists while in the hospital.
  - Do NOT stand, bend knees and twist at the same time.
  - For some hip replacements, precautions may include use of a special pillow between your legs while in bed
  - Call your provider right away if you note:
    - Inability to bear weight on your affected leg, increased numbness/tingling in the leg, change in leg length, bulge felt over the hip, or new onset of severe pain in affected joint.



### Question 1

# How can I prevent risks before and after surgery?

- A. Handwashing
- **B.** Practice exercises
- C. Use the incentive spirometer
- D. Secure rugs and electrical cords
- E. All of the above



# **Getting Ready for Surgery**

### Identifying a "Coach" (your support person)

- Establish a caregiver, or "coach", to support you through pre-op, surgery, discharge, and recovery phases of your joint replacement surgery.
- Understand and set expectations for your surgery, hospital discharge, and recovery
  process to ensure the best possible outcome.

### Pre-Admission Testing

- Diagnostic tests: EKG, chest X-ray, blood and urine tests \*sometimes ordered by your primary care provider
- Review of current medications, MRSA screening, type & screen (blood test), and distribution of the CHG bath kit \*Completed at USC Arcadia Hospital's Pre-SOC department
- USC Arcadia Hospital's Pre-Surgical Optimization Center contact information: (626) 821-6997



# Getting Ready for Surgery

#### Exercise

- Strengthen muscles to assist with recovery and healing process
- Practice pre and post-op exercises to become familiar with a routine prior to surgery

#### Prepare your home

- Remove hazards such as area rugs and electrical cords
- Arrange for pet care if necessary
- Stock home with food and groceries, fiber rich foods, stool softener, or laxative
- Install handrails along stairways and/or in the bathroom
- Practice good health habits
  - Make sure your diet consists of well-balanced, healthy meals
  - Clear all medications with your care providers
    - \*Refill necessary prescriptions BEFORE your surgery date
  - Talk with your physician about discontinuing blood thinning medications 7-10 days prior to surgery

\*See "Medications to Avoid" provided in your joint class education packet

• If you are a smoker, it is HIGHLY suggested you quit at least 1 month before surgery, as nicotine can slow the healing process and increase your chances of infection







# **Equipment Considerations**

Standard equipment may be needed after surgery. You may want to contact your insurance company to find out which items will be covered and can be obtained prior to surgery.

- A front-wheeled walker
- An elevated toilet seat or bedside commode









### **Equipment Considerations**









- The **sock aid**
- The reacher/grabber stick
- The long-handled sponge
- Safety bars
- A tub bench/shower chair
- A basket or bag
- Long-handled shoe horn



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# **Equipment Rentals & Purchasing Information**

- **Convalescent Aid Society** Pasadena (626) 793-1696 \**Loans used equipment as inventory permits*
- Unique Medical Equipment Alhambra (626) 282-2059
- Western Drug Medical Supply- Glendale (818) 956-6691
- San Gabriel Medical Pharmacy (& equipment) West Covina (626) 960-8696
- Cucamonga Medical Equipment & Supplies Rancho Cucamonga (909) 944-9300
- Discount Medical Equipment & Supplies Riverside (951) 750-7077

\*Many of the medical supplies, equipment and even groceries can be found on online with same-day delivery options.









# Question 2 How can I prepare for surgery?

A. Rent or purchase items I need after surgery
B. Take as many vitamins and minerals over the counter to help boost my immune system
C. Identify your coach or support system
D. Attend my Pre-Admit Testing appointment
E. answers C and D



# Break Time 5 minutes





# The Day BEFORE Surgery

- Pack for your 1 day hospital stay
  - See checklist in your folder for list of items to pack
- Use the 1<sup>st</sup> bottle of CHG body wash before going to bed, and make sure there are freshly cleaned sheets on the bed
  - Do NOT shave for at least 3-4 days prior to surgery
- Do NOT eat or drink anything after midnight
  - Check with your care providers for any medications that may need to be taken the morning of surgery
- Remember to get a good night's sleep







# The Day of Your Surgery

### Morning of Your Surgery

- Use the 2<sup>nd</sup> bottle of CHG body wash the morning of your surgery.
  - Be sure to have clean sheets on the bed for your return home.
- Arrive at the hospital 2 hours prior to your scheduled surgery.
- Escort to pre-op department where you will need to remove all personal belongings .
  - This includes: clothes, underwear, jewelry, dentures, contacts, hearing aids, wigs, hairpins, etc.
- An IV will be started by the pre-op nurse and the anesthesiologist will meet with you to discuss your medical history and surgical anesthesia options.
  - Visitors will be directed to the 2<sup>nd</sup> floor waiting room while you are in surgery.

### Following Surgery

- Recovery is in the post anesthesia care unit (PACU) for approx. 1-2 hours until you are ready for transport to our orthopedic unit.
- You may wake up from surgery with various pieces of medical equipment connected to your body (most are removed within 24 hours).
  - Possible equipment may include: urinary catheter, surgery site drain, sequential compression stockings (SCDs), nasal cannula for oxygen, and maybe a pain control pump (PCA pump).



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### **Types of Anesthesia**

### Local Anesthesia

- Medication is injected directly to the part of the body where the surgery will take place.
- When used as part of multimodal analgesia, local anesthesia given during surgery may help reduce pain after surgery, reducing the need for opioid drugs.

### **General Anesthesia**

- Selected based on patient, surgeon, or anesthesiologist preference, or if you are unable to receive regional anesthesia.
- Administered through injection or inhalation that will affect your entire body, rendering you temporarily unconscious.
- Requires a breathing tube to assist with your breathing during surgery.
- Regional Anesthesia
  - Involves blocking nerves to a specific area of the body, without affecting your brain or breathing.
  - There are 2 types of regional anesthesia used most frequently during joint replacement surgery:
    - Spinal Block
    - Peripheral Nerve Block
  - Advantages to regional anesthesia may include less blood loss, less nausea, less drowsiness, and improved pain control after surgery.
  - Side effects may include: headaches, trouble urinating, allergic reactions and in very rare cases nerve injury.







# Goals for the DAY of Surgery

Once oriented to your room on the surgical unit of the hospital, our highly trained joint replacement care team will assist you with achieving some of the following goals on the day of surgery:

- Sit on the edge of your hospital bed.
- Work with your Physical and Occupational Therapists.
- Deep breath, cough, and perform incentive spirometer exercises.
- Additional goals may be set by you and your orthopedic surgeon.







# During Your Hospital Stay

- **Physical Therapy (PT):** Our team will work with you twice daily to ensure a safe return to walking and proper mechanics when using stairs and assistive devices.
- Occupational Therapy (OT): The OT team will help you plan safe ways to complete daily activities such as getting dressed and offering ways to ensure safety at home following discharge.
- **Care Coordination:** A Case Manager, your nurse or Social Worker will work together to assist you with discharge needs such as setting up home health for in-home PT, arranging for medical equipment, or assisting with a possible discharge to another care facility prior to going home.







# **Pain Management AFTER Surgery**

- Discomfort
  - You WILL have pain following surgery. The goal is to get the pain low enough so you can rest and participate in physical therapy.

### Non-Pharmacological

• To help reduce inflammation and pain, it's generally recommended you use an **ice** pack four to five times a day for about 10-20 minutes during the first few days after surgery.

### Oral Pain Medication

- Once tolerating a regular diet, oral medications can be started.
- Takes longer to relieve pain, so it is suggested you request a pain pill 30 minutes to 1 hour <u>prior</u> to working with physical therapy.
- **Opioids** (such as oxycodone and hydrocodone)
  - Effective in reducing pain after surgery
  - Side effects may include drowsiness and constipation
  - Regular opioid use can lead to dependence and sometimes addiction
- Non-Opioid Pain Pills
  - <u>Multimodal analgesia</u> means using 2 or more medications for pain relief. One of the goals of multimodal analgesia is to decrease your need for opioid medications.





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# **Hospital Discharge**

### Length of Stay (LOS)

- Average Hospital Stay = 1 Night
  - Your surgeon will determine your length of stay in the hospital and instruct the joint replacement team on appropriate discharge instructions specific to your needs.

### **Discharge Disposition**

- Home
  - Home is the discharge GOAL following joint replacement surgery.
  - Ability to walk with an assistive device.
  - Ability to get in and out of bed without direct assistance.
  - Home health physical therapy typically ordered 3 times weekly.
- Skilled Nursing Facility (SNF)
  - Daily physical therapy services.
  - Ongoing assessment for discharge to home or rehab facility.
  - Must have a medical/physical need to be approved and covered by insurance. Insurance approval is required.







# Question 3 What are my goals to go home?

A. Work with Physical Therapy and Occupational Therapy to learn how to safely perform activities
B. Tolerate my diet and use the bathroom
C. Ensure I have my equipment before I go home
D. Speak with the team about my pain management
E. All of the above

### Additional Considerations for Your Joint Replacement Surgery

- **Driving:** Typically, patients may not drive until 4-6 weeks post-surgery. Speak with your surgeon regarding clearance to drive following joint replacement surgery.
- **Dental Appointments:** Be sure to notify your dentist of your newly replaced joint, as antibiotics may need to be prescribed prior to your next dental appointment.
- **Metal Detectors:** If traveling or attending an event where metal detectors are used, please notify the security attendant of your prosthesis, as you may be screened using an alternative method.
- Incisional Care: Proper wound healing is critical to the success of joint replacement surgery. It is
  important to keep your incision clean and dry following surgery.
   \*Showering may not be permitted until you've been seen by your surgeon at the first post-op appointment.
   \*Some surgeons use a waterproof dressing and may allow you to shower.
- **Preparation:** We encourage you to eat a balanced diet, follow all exercise and joint precaution instructions appropriately, take medications as prescribed, and communicate with your care providers so you can achieve the best possible outcome and return to enjoying daily activities.





# Question 4

# What do I need to do when I am home?

A. Confirm my follow up appointment with my surgeonB. Take all my medications as orderedC. Walk daily and work with my home health

therapist

D. Keep in contact with my Patient Navigator

E. All of the above



Thank you for choosing USC Arcadia Hospital for your joint replacement surgery!

### **Questions?**





31

### **Important Numbers**

- **2 Tower Nurses Station** 626-462-2720
- Patient Navigator Katrina 626-898-8564
- **Pre-Admit Testing** 626-821-6997
- Medical Records- 626-574-3513
- Patient Portal (access to medical information online) 626-574-3582
- **Billing** 626-574-3594



### References

- http://orthoinfo.aaos.org/main.cfm
- http://www.mayoclinic.org/
- http://www.hipandknee.com/
- http://www.orthonurse.org/
- http://www.amazon.com
- https://hipknee.aahks.org/exercise-guides/



