



# Pre-operative Education Total Knee And Total Hip Replacement

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TOWER HEALTH

Advancing Health. Transforming Lives.

# What Makes Us Unique?



## A Dedicated Joint Unit

- Specially trained orthopedic nurses, physical therapist, and occupational therapist to care for patients with joint replacements
- Dedicated physical therapy gym
- Physicians use advanced surgical techniques to increase mobility and reduce pain

## Patient Education/Preparation

- Hip and Knee Replacement Handbooks provide education four weeks before surgery
- Pre-op Class increases patient and family knowledge with focus on discharge planning

## Patient Care: A Culture of Wellness and Early Patient Mobility

- Out of bed, walking day of surgery
- Patients wear own clothing
- Group physical therapy sessions 9 a.m. and 1 p.m.
- Standardized/customized pain protocols initiated pre- and post-operatively to decrease use of narcotics, allow faster rehab and discharge after overnight stay
- Follow-up phone calls day after discharge

## Patient Satisfaction

- Nurse practitioner provides cell number
- Consistently high patient satisfaction (97% average score)
- Monthly performance improvement team meetings to review performance and identify opportunities for improvement

## Community Education

- Community Education Seminars about hip and knee pain, joint replacement, and other topics

# Objectives

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- Preparing for Surgery
- The Day of Surgery
- Post-Op Recovery
- Success at Home



# Preparing for Surgery: Exercise

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- Exercise before surgery improves your recovery
- Types of Exercise:
  - Walk
  - Range of motion
  - Strengthening
- **Joint Replacement Guide**
- **Patient Goals** – Why are you having surgery?



# Preparing for Surgery: Home Safety

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- Remove throw rugs and electrical cords
- Clear pathways for walker
- Supportive chair with arm rests
- Position commonly used items in easy reach
- Keep pets away when you return home
- Discharge Plans-HC, SNF Equipment
- Find someone to be your coach for assistance and motivation (family member, spouse, child, sibling, close friend, neighbor)

# Pre-Op Checklist

## ✓ Pre-Admission Testing (PAT)

- Labs
- X-rays
- EKG
- Pre-Admission Testing will be done on an outpatient basis. You will receive a phone call from a Pre-Admission Testing nurse prior to surgery to go over your health history.

## ✓ Doctor Visits

- Surgeon
- Primary Care Clearance
- Cardiology Clearance
- Dental Clearance - antibiotic one hour before dental cleaning usually for two years after joint replacement surgery

## ✓ Begin eating foods rich in iron and vitamin C

## ✓ Medications

- The Preadmission Testing nurse will review your current medications and instruct you what to stop and continue before surgery (medications that increase bleeding will be stopped).
- Check with doctor about blood thinners you take for a heart condition.
- Narcotic pain medications and Tylenol are ok to continue up until surgery.
- PeriColace (OTC) - Take one tablet by mouth daily for two days prior to surgery to prevent constipation.





## Report Any Infections or Cuts

- Tell your surgeon if you have any cuts or infections/rashes, poison ivy, tooth abscess, cat bites. Surgery may be cancelled.
- Wear long pants for six weeks to protect your surgical site.
- Tell your surgeon if you had any recent changes in your health or flair up of chronic conditions.
- Follow instructions for three pre-op Hibiclens showers, changing bed linens as directed by Preadmission Testing (PAT) nurse.
- Do not shave your legs five days prior to surgery.

# Day Before Surgery

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- Drink 8-10 (8 oz. glasses of water) to help stay hydrated.
- You will receive a call after 2 p.m. to confirm arrival time for day of surgery. You will be admitted two hours ahead to prepare for surgery.
- Nothing to eat or drink after midnight the night before surgery – even gum, mints, or water.
- You may brush your teeth and rinse your mouth out.



# Packing List

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## Bring

- Medication list, past medical/surgical history
- Loose-fitting clothes (shorts, sweats, short-sleeve shirt, underwear, socks)
- Sneakers
- Hearing aids, dentures
- ID and insurance card

## Do NOT Bring

- Medications
- Jewelry
- Credit cards/cash

# The Day of Surgery

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- Take only medications instructed to take with sips of water.
- Report to registration, front of hospital, 1<sup>st</sup> floor North Tower
- You will be directed to Short Procedure Unit - 3<sup>rd</sup> floor

## **Admission Process:**

- RN will ask basic questions
- Start IV
- You will change into gown
- You will meet Operating Room Team
- Your belongings will be transported with you to your room after surgery

# Anesthesia

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- Spinal anesthesia is the gold standard for total joint replacements.
- Lidocaine will be used to numb the area, then the spinal needle will be inserted between your vertebrae.
- You will be numb from the nipple line down.
- You will also receive IV sedation. You will be asleep, but breathing on your own.
- General anesthesia (another option)



# Surgery

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- Surgery lasts approximately two hours.
  - Family can wait in the surgical waiting room, or leave and we will call them when your surgery is complete.
- Once completed, your surgeon will speak to your loved one(s) to inform them of how it went.

# Surgery

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- Prior to closing your incision, the surgeon will check:
  - That your new joint moves well and is well-secured
  - That the length of your legs are equal
- The incision will be closed with:
  - Internal dissolvable sutures
  - Skin glue
- The incision will be covered by a waterproof dressing, which contains a silver agent to decrease your risk of infection.

# Recovery Room

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- One and a half to three hours until fully awake, blood pressure is ok, and pain level is comfortable
- Lines and equipment attached:
  - Oxygen via nasal cannula
  - Oxygen monitor on your finger
  - Blood pressure cuff on your arm
  - IV access
  - Heart monitor (if you have a cardiac history)
  - Total knee replacement (only) - ACE wrap from your toes to your thigh, removed the following day
  - Compression foot pumps bilaterally to prevent blood clots



# Post-Operative Recovery

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- Arrive on 4North, private room
- Nurse will ask for your completed menu. You will receive your lunch in 40 minutes. It is important to eat and drink fluids to prevent dizziness or lightheadedness.
- It is not uncommon to feel lightheaded or dizzy the first time you get up. You will use a rolling walker and walk with a physical therapist.
- Once feeling in your lower extremities returns (if you received spinal anesthesia), a physical therapist will take you for a walk using a rolling walker. Please keep your rolling walker in trunk of car to help you get into your home. May take a few hours to urinate.
- If total hip replacement (posterior approach), instruct on hip precautions (anterior approach, no hip precautions).
- Respiratory Therapist or nursing will instruct on incentive spirometry, prevents pneumonia.
- Foot pumps on at all times, **except when walking** to prevent blood clots.
- Ice, ice, ice on at all times while awake, except when walking.



# Pain after Surgery

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- There *will* be pain after surgery.
  - Surgical Pain: Will go away
- Pain Scale: 0 to 10 Goal: <5

## Multimodal Pain Regimen Reduce Opioids

- Scheduled Tylenol every eight hours
- Scheduled Toradol (anti-inflammatory) every six hours, if Cr (kidney function test) is normal
- Total knee replacement - exparel, adductor block
- Total hip replacement - same scheduled medications, except no exparel or block
- **Ice Pack**
  - Keep on continuously when not walking
  - Can help with breakthrough pain

# Medications after Surgery

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- All of your home medications will be restarted.
- New medications to prevent:
  - Blood Clot: Aspirin
    - Protonix: protect stomach while on aspirin
  - Nausea: Zofran
  - Constipation: Colace



# Day after surgery

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## Daily Routine

- The day begins at 6 a.m., blood work and vital signs are taken
- Bathed and dressed in own clothing
- Out of bed in recliner by 7:30 a.m.
- Breakfast at 7:30 a.m.
- Call nurse for pain medication at 8:30 a.m.
- 9 a.m. walk to gym with physical therapist for group therapy sessions
- Group physical therapy - exercise as a group (knee and hip replacements) 9 a.m. and 1 p.m.
- Your coaches are encouraged to attend at least one session

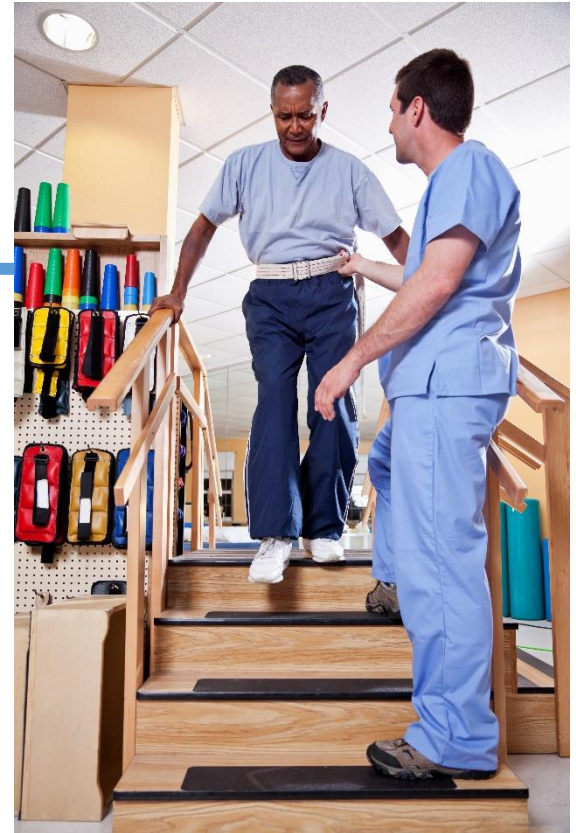
# Occupational Therapy

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- Assist with activities of daily living – dressing, bed mobility, bathroom training, daily self-care
- Posterior approach - educate hip precautions and use of assistive devices
- Anterior approach - review walking program

# Early Ambulation Day of Surgery

- Physical therapist will see you the day of surgery, depending on your time of surgery.
- For later surgeries, physical therapy will begin the following morning. Nurses will assist you to ambulate day of surgery.
- Goal: Out of bed within four hours of getting to your room
  - Walk in corridor, sit on commode
  - The more you move, the better you feel





# Rehab after Surgery

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- Group Physical Therapy:
  - Knee and hip replacements, support and encourage each day after surgery, 9 a.m. and 1 p.m. sessions
  - Exercises to do in the room
- Progression
  - Each day will get a little better than the day before
- Goals:
  - Total knee: 0-90° range of motion, home exercise program three times/day
  - Total hip: Know your hip precautions, walking program

# Recognizing and Preventing Complications

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- **Blood clots (DVT)** - Swelling and severe pain in calf, thigh, or ankle that does not go down with elevation
  - **Causes:** Damage may occur to blood vessels during surgery. May initiate clots. Restricted mobility, prior DVT, PE, smoking or obesity are major contributing factors to develop blood clots. Risk of DVT may last 3 months
- **Pulmonary Embolism** - Sudden chest pain, elevated heart rate, low pulse ox, shortness of breath, sudden anxiety or nervousness, sweating, confusion. **Call 911, as this is a medical emergency.**
  - ✓ **Prevention: Foot pumps-whenever not walking**
    - Ankle pumps - 20-30 every half hour
    - Early ambulation
    - Blood thinners - aspirin 81 mg twice a day for four weeks or Xarelto if high risk (past medical history of blood clots or pulmonary embolism). Eliquis, coumadin, or lovenox may be used.
- **Infection** - Incision red, hot, fever 101.5, increased drainage and pain, swelling
  - ✓ **Prevention:** Three Hibiclens showers, sage wipes in Short Procedure Unit, IV antibiotics before and after surgery, dressing placed on incision in OR, silver in lining of dressing to prevent antimicrobials from entering, clean bed linens and clothing prior to surgery, keep incision clean, wash hands frequently

# Recognizing and Preventing Complications

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- **Pneumonia** – cough, fever, chest tightness, SOB, low pulse ox
  - ✓ **Prevention:** Deep breathing, early ambulation hours after surgery, incentive spirometry 10 times/hour, stop smoking
- **Hip dislocation** – severe pain in operative hip, unable to walk
  - ✓ **Prevention:** Use adaptive equipment, maintain hip precautions (**posterior approach only**, usually for 12 weeks), do not cross legs (use pillow between legs), twist side to side or bend at hip past 90 degrees or turn toes inward

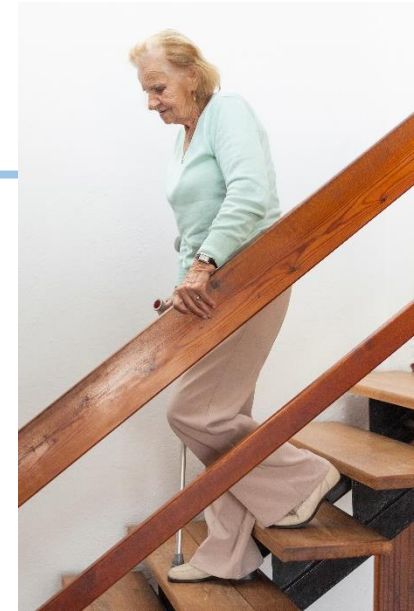
# Discharge: Day after Surgery

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- Goal: **Home**
  - PT/OT will make sure you are able to ambulate independently and climb stairs
- Case Manager will coordinate home care service and if needed, Skilled Nursing Facility

## Discharge Instructions:

- Review of medications
- Surgeon's follow-up appointment two weeks from surgery (inspect incision, mobility, progress)
- Nurse Practitioner will call day after discharge to assess progress (call 215-370-6921 with questions)
- Discharge instructions for total knee and total hip replacement, **post on refrigerator for reference**



# Post Discharge Phase

- Hip replacement patients – walking program
- Knee replacement patients (individualized) options:
  1. Home exercise program, three times/day
  2. Home physical therapy – Typically begins day after surgery, three times a week for one to two weeks
  3. Home care services (nursing and physical therapy)
  4. Outpatient physical therapy as soon as possible

# Care of Your Incision at Home

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## Dressing:

- May shower day after discharge with waterproof dressing on and pat dry.
- Remove on post-op day 7 and leave uncovered at that time.

## Incision Care: *wound healing takes 10 days*

- Allow water and soap suds to gently run over incision - no vigorous rubbing. Gently pat dry with fresh towel.
- No creams, lotions, or ointments on or around the incision until surgeon approves
- Do not soak incision until surgeon approves



# Infection Prevention at Home

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- Wash hands often
- Do not allow pets to sleep in bed with you, or touch or lick the incision.
- If an infection occurs, it needs to be treated right away.
- Call the office if:
  - You have fever or chills
  - You notice white, green, or yellow drainage from the incision
  - You notice the area around the incision is red, hot, and swollen

# Success at Home

## Daily Routine

- ✓ Eat 30 minutes before taking pain medication
- ✓ Take pain medication every four hours, if needed
- ✓ Begin exercise 30 minutes after pain medication three times/day
- ✓ Ambulate every hour for 10 minutes, while awake
- ✓ Elevate feet to decrease swelling
- ✓ Keep schedule of medications, check off when take
- ✓ Blood thinner - prevent blood clots
- ✓ Protonix - prevent stomach ulcer while taking aspirin
- ✓ Constipation - common when taking narcotics
  - ✓ Treatment: ambulation, fluids, increase fiber, pericolace or mirilax or (Milk of Magnesia 30 ml with 4 oz prune juice, mix together, place in microwave for 15 seconds)
- ✓ Meloxicam - anti-inflammatory
- ✓ Wean narcotics as soon as possible, supplement with Tylenol [1,000 mg every eight hours as needed for mild pain (3,000 mg total per day)]
- ✓ Continue foods rich in iron and vitamin
- ✓ Melatonin - Over-the-counter, natural hormone our body produces, used for insomnia, improves sleep. Don't sleep too much during the day (interferes with nighttime sleep). Take melatonin if unable to sleep.



## Outpatient Physical Therapy

- Usually begins two to four weeks after surgery
- Two to three times per week for 8 to 12 weeks depending on goals.

# Metal Detectors and Joint Replacements

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- No need to carry a card identifying that you have an implant.
- Tell the TSA agent prior to walking through metal detectors that you have a metal implant in your body.
- You will go through an otherwise normal TSA screening process.

# Physical Therapy

## Staying Active After Surgery

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- Exercise three times a day (see handout for pictures and repetitions)
- Outpatient physical therapy
- Walk smart, wear good shoes
- Aquatic exercises best in water 85 degrees, water height to waist decreases weight bearing by 50%, to chest by 70%



We don't just  
replace joints.

We restore  
lives!

Thank You