



# Total Joint Surgery

**Student Name: Layla Espinola-Keel**

**Date: 10/21/2025**

---



## Instructions:

Complete the worksheet based on your assigned readings and class notes. Each section includes a mix of short answer, multiple choice, and matching questions. This will help you review nursing care principles related to total joint surgery patients.

---

### 1. Hip Precautions (After Total Hip Replacement)

**A. List 3 standard hip precautions** to teach a patient after a posterior total hip replacement:

1. Safe walking to prevent falls
2. Adequate Ca and Vit D supplements
3. Safe exercises for muscle strength that will not dislocate joint

**B. Why are these precautions important?**

Allow patient to properly recover from procedure. Patient needs to be knowledgeable to allow joint to be fully acclimated to body and gain back full ROM without potentially dislocating new hip.

### 2. Continuous Passive Motion (CPM) Machine

**A. What is the purpose of using a CPM machine after total knee replacement? Continuously moves patient knee to help build full ROM. Starts low and works up to 90 degrees. Prevents joint from freezing**

**B. Select the correct nursing intervention when caring for a patient using a CPM machine:**

- a. Set the machine to 90 degrees to promote mobility
- b. Set the range of motion to flex and hyperextend the knee
- c. Monitor skin integrity and ensure the limb is properly aligned
- d. Use only during physical therapy sessions and not at the bedside

---

### 3. VTE (Venous Thromboembolism) Prophylaxis

Match each intervention with its role in DVT prevention:

Intervention	Purpose
A. Early ambulation	<u>  2  </u>
B. Sequential compression devices	<u>  1  </u>
C. Low molecular weight heparin	<u>  3  </u>
D. Leg massage	<u>  4  </u>

#### Options:

1. Increases blood flow by mechanical compression
2. Increases mobility and circulation
3. Reduces clot formation chemically
4. Contraindicated; may dislodge a clot

---

### 4. Infection Prevention

A. List two key ways nurses can prevent post-operative infection in joint surgery patients:

1. Administer antibiotics per doctors orders
2. Proper hand hygiene and aseptic technique when performing wound care

B. Why is infection especially serious in patients with joint prostheses?

It may lead the body to reject the prosthesis which would add more stress to the body. A recent surgical procedure is already invasive, if a infection took place the body would be under more stress and be more likely to reject the new joint. This may result in surgical removal of prosthesis and further medication interventions which may add stress to the body's liver and kidneys.

### 5. Hip Prosthesis Dislocation

A. Circle the **signs and symptoms** of possible hip prosthesis dislocation:

- Shortened leg
- Internal leg rotation
- External leg rotation

- Severe hip pain
- Increased mobility

**B.** What is the **first nursing action** if you suspect a hip dislocation?

Asses and Immobilize the patients leg/joint to prevent further damage or dislocation

## 6. Pre-Operative Strengthening Exercises

**A.** Name **two pre-op exercises** that may be recommended to a patient before joint replacement surgery:

1. Ankle or foot pumps
2. Quad sets/squeezes

**B.** How do these exercises help recovery?

These help strengthen muscles, promote circulation, and improves mobility. All components necessary for discharge eligibility and prevent further complications such as DVT.

## 7. Tourniquet Use in Surgery

**A.** What is the purpose of using a tourniquet during joint surgery (e.g., total knee replacement)?

To stop blood flow and lower the risk of bleeding during the surgical procedure

**B.** List **one complication** that nurses must monitor for after tourniquet use:

Impaired circulation, the nurse must monitor capillary refill, color, temp, sensory of the affected leg.

### Reflection Question (Short Answer):

What is the nurse's role in educating and advocating for patients undergoing total joint surgery?

To ensure patient safety and understanding to promote success of the joint replacement. The nurse helps reinforce education (along with the provider, PT, etc.) for safe recovery. The patient must be knowledgeable in how to prevent dislocation and report concerns such as infection and prolonged constipation.

