

ATI - Total Hip Arthroplasty

Nursing Problem Worksheet

Name: Reagan Hockenbrock

Anticipated Patient Problem and Goals	Relevant Assessments (Pework) What assessments pertain to your patient's problem? Include frequencies	Multidisciplinary Team Intervention (Pework) What will you do if your assessment is abnormal?
Problem: Acute Pain Reasoning: Self reported pain rating and characteristics diaphoresis, facial grimacing. Goal: Pt reports decreased intensity of pain using numeric pain scale Goal: Pt exhibits increased comfort such as baseline levels for pulse, BP, respirations, and relaxed muscle tone.	Assess characteristics of pain after every self reported pain rating.	Maintain the proper position of the affected extremity at all times.
	Assess the pts pain rating using a numeric or face scale at the start of each shift, Q2h, and PRN.	Apply ice packs as ordered to the affected extremity.
	monitor pts VS for increased HR, BP, or respirations Q4h.	Administer opioid analgesics as ordered.
	Assess the pts goal for their pain management after every reported pain.	Provide rest periods to facilitate comfort, sleep, and relaxation Q4h.
	Assess what degree culture, environmental, intrapersonal, and intrapsychic factors may contribute to pain or pain relief at the beginning	Use nonpharmacological measures including back rubs and progressive relaxation to refocus the pts attention Q4h.

levels for pulse, BP, of each shift.
respirations, and relaxed muscle tone.

Anticipated Patient Problem and Goals	Relevant Assessments (Pework) What assessments pertain to your patient's problem? Include frequencies	Multidisciplinary Team Intervention (Pework) What will you do if your assessment is abnormal?
Problem: Impaired Mobility Reasoning: Inability to move purposefully within physical environment, reluctant to attempt to perform action as instructed. Goal: Pt demonstrates use of adaptive techniques that promote ambulation and transferring.	Assess the pts postoperative ROM at the beginning of each shift.	Encourage active ROM with all unaffected extremities Q4h.
	Assess the pts mobility and restrictions according to PT consults prior to each shift.	Encourage exercise as prescribed to the affected joint, frequency depending on joint.
	Assess the pts level of understanding of postoperative restrictions prior to ambulation or teaching.	Encourage the use of assistive devices and educate on use during repositioning and ambulation.
	Assess the pts fear or anxiety about transferring or ambulating prior to encouraging movement.	Encourage the use of analgesics before position changes PRN.
	Assess the pts physical limitations including medical equipment Q12h.	Maintain weight-bearing status on the affected extremity as prescribed.

promote ambulation and transferring.

@ Pt performs physical activity within limitations of prescribed mobility restrictions.

Student Name: Reagan Hockenbrock
 Medical Diagnosis/Disease: THA - Osteoarthritis

NCLEX IV (8): Physiological Integrity/Physiological Adaptation

Anatomy and Physiology
Normal Structures
 Composed of voluntary muscle and 6 types of connective tissue: bone, cartilage, ligaments, tendons, fascia, + bursae.
 → Serves to protect body organs, provide support and stability for the body, store minerals, and allow coordinated movement.

Pathophysiology of Disease
 → Gradual loss of articular cartilage with formation of bony outgrowths at the joint margins
 → In OA the cartilage becomes softer and less elastic
 → Although the body attempts to repair cartilage, it cannot keep up with the destruction of OA. Collagen structure changes causing articular surface to crack and wear.

NCLEX IV (7): Reduction of Risk

Anticipated Diagnostics
Labs
 Erythrocyte sedimentation rate (ESR), synovial fluid analysis, CBC, liver function tests (LFTs)
Additional Diagnostics
 X-Rays showing joint space narrowing + dense bone
 Bone scan, CT, MRI

→ causes joint surfaces to become thicker, forming osteophytes

NCLEX II (3): Health Promotion and Maintenance

Contributing Risk Factors
 Genetics, metabolism, age, gender, drugs, endocrine, hematologic inflammation, joint instability, mechanical stress, trauma

Signs and Symptoms
 joint pain, joint stiffness, crepitation, joint deformity
 → feelings of joint pain and stiffness may increase with movement and weather

Possible Therapeutic Procedures
Non-surgical
 Acupuncture, nutrition supplements, hydrotherapy
Surgical
Reconstructive
 Surgeries: hip/knee replacement, arthroscopy

Prevention of Complications
 (What are some potential complications associated with this disease process)
 Immobility, decreased ROM, falls, chondrolysis, osteonecrosis, stress fx, bleeding inside the joint

NCLEX IV (6): Pharmacological and Parenteral Therapies

Anticipated Medication Management
 NSAIDs, topical salicylates, cyotec, celebrex, aspirin, intraarticular corticosteroid injections

NCLEX IV (5): Basic Care and Comfort

Non-Pharmacologic Care Measures
 Physical exercise, weight loss, ice packs, stretching, rest

NCLEX III (4): Psychosocial/Holistic Care Needs

What stressors might a patient with this diagnosis be experiencing?
 loss of independence, fear of surgery, inability to participate in activities once enjoyed

Client/Family Education

List 3 potential teaching topics/areas
 • ROM exercises
 • nutrition therapy
 • Rest and joint protection

NCLEX I (1): Safe and Effective Care Environment

Multidisciplinary Team Involvement
 (Which other disciplines do you expect to share in the care of this patient)
 Surgical team, PT/OT, dietician, hospitalist, pharmacy

Total Hip Arthroplasty (THA)

→ total hip replacement

Explanation of Procedure

- When the implant replaces the ball and socket joint formed by the upper shaft of the femur and the pelvis.
- Both prosthetics are cemented into place with polymethyl methacrylate, bonding to the bone.
 - the surgery may be cementless, using no bonding agent. this is more commonly seen in younger, more active pts. this is because a cementless procedure encourages the growth of new bone into the THA components.

Indications of the Procedure

- pts experiencing joint deterioration from osteoarthritis and rheumatoid arthritis
- Tx of hip fx

Priority Post-Op Assessments

- VS

- I & O's

- Monitor Respiratory Function

- Pain assessment / management

- Dressing / wound assessment

- Neurovascular Assessment

Potential Post-Operative Complications

- blood clots

- Stroke

- heart attack

- arrhythmia

- pneumonia

Bones

→ point of attachment for muscles + ligaments, provide supporting framework, produces blood cells

→ composed of organic material (collagen) and inorganic material (calcium, phosphate)

→ Structure

1. Cortical (compact bone)

↳ composed of osteons (Haversian systems) that are closely packed together; Haversian canals run parallel to the long axis containing blood vessels; osteons surrounded by lamellae; canniculi extend from the Haversian canals to the lacunae where mature bone is

2. Cancellous (spongy bone)

↳ lamellae occur along the lines of maximum stress on the bone
↳ filled w red or yellow marrow

→ Cells

1. Osteoblasts: make organic bone matrix (collagen); bone forming cells

2. Osteocytes: mature bone cells

3. Osteoclasts: role in bone remodeling; breakdown bone tissue

→ Classifications

1. Long bones - femur, tibia, humerus

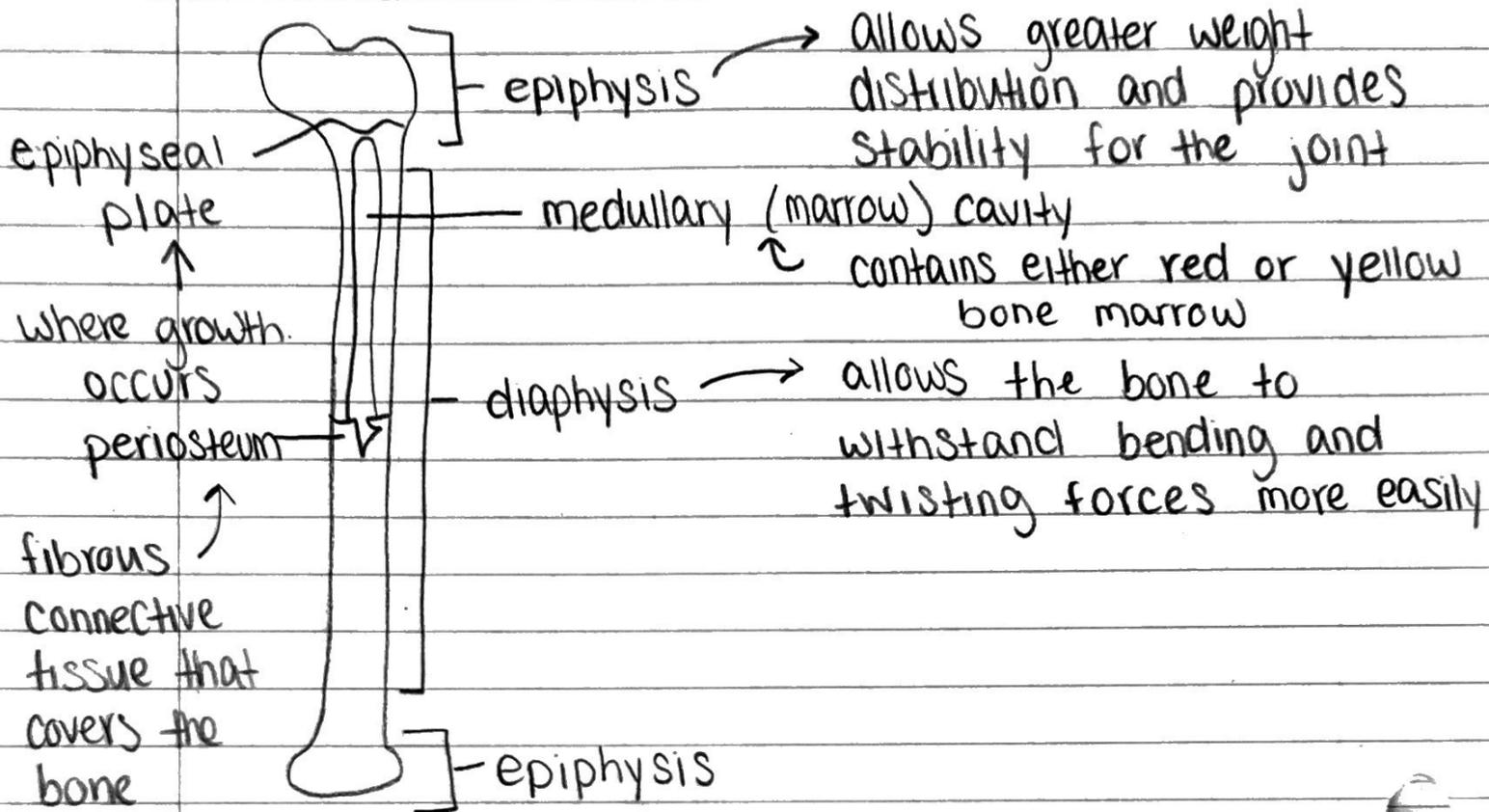
2. Short bones - carpals + tarsals

3. Flat bones - pelvis, skull, sternum

4. Irregular bones - sacrum, mandible, ear ossicles

5. Sesamoid bones - patella

→ Structure Pt. 2



* red bone marrow = involved in blood cell production

* yellow bone marrow = adipose tissue where triglycerides are stored

Joints

→ point at which 2 bones are close and move in relation to one another

→ classifications by degree of movement allowed

1. diarthrodial (synovial) joints

↳ enclosed in fibrous tissues containing synovial fluid

↳ most moveable

↳ further classified

→ hinge joint (elbow)

→ ball + socket joint (hip)

- Pivot Joint (radioulnar)
- Condylloid (wrist)
- Saddle (thumb)
- Gliding (tarsals)

2. Amphiarthrosis

- ↳ Slightly moveable
- ↳ pubic symphysis

3. Synarthrosis

- ↳ immovable
- ↳ skull sutures

Cartilage

- Fibrous cartilage consists of collagen fibers and acts as a shock absorber
 - ↳ found btwn vertebral discs
- Articular cartilage
 - ↳ found in synovial joints
 - ↳ serves as a support for soft tissue and provides articular surface for joint movement
 - ↳ covers epiphysis