Name: Emily Johnson

Nursing Problem Worksheet

Anticipated Patient Problem and Goals	Relevant Assessments (Prework) What assessments pertain to your patient's problem? Include frequencies	Multidisciplinary Team Intervention (Prework) What will you do if your assessment is abnormal?
Problem: Impaired physical mobility Reasoning: limited range of motion, need for assistive devices, weakness Goal: pt will demonstrate use of ambulatory devices by teach-back method during my care Goal: pt will ambulate to BR with assistance by the end of my care	assess pt need for using the BR q2hr	Encourage assistance to the BR to promote ambulation
	assess pt for dizziness or weakness before ambulating when walking	encourage pt to rest and provide water
	assess pt pain score level q2hr	administer oxycodone for pain relief
	assess pt knowledge & education of ambulatory devices	demonstrate proper use of asistive devices
	assess pt strength and range of motion q4hr	provide passive range of motion to lower extremities

Anticipated Patient Problem and Goals	Relevant Assessments (Prework) What assessments pertain to your patient's problem? Include frequencies	Multidisciplinary Team Intervention (Prework) What will you do if your assessment is abnormal?
Problem: risk for infection Reasoning: Surgical insision, Presence of prosteric implant, Goal: Pt incision will remain clean dry & intact during my care Goal: Pt will show no signs of infection (no redness, swelling, drainage fever) during my shift	assess pt surgical incision dressing q8hr	change, clean, & Place new dressing if dirty
	assess pt linnens for dirtyness	change linnen & relace with clean linnen
	assess pt vital signs q4hr	contact Provider for possible antibiotics
	assess pt input & output q6hr	encourage fluids & eating of meal trays
	assess pt skin integrity q2hr	Change pt position q2hr to prevent from pressure wounds

ACTIVE LEARNING TEMPLATE: *Medication*

STUDENT NAME Emily Johnson
MEDICATION morphine Sulfate (IVP) REVIEW MODULE CHAPTER _____
CATEGORY CLASS Opioid, Controlled Substance Schedule: II

PURPOSE OF MEDICATION

Expected Pharmacological Action
binds with and activates opioid receptors in the brain & spinal cord and alters the preception of and response to painful stimuli while producing generalized CNS depression

Therapeutic Use
to relieve pain severe enough to require opioid treatment and for alternative treatment options such as nonopioid analgesics or opoid combination products are inadequate or not tolerated

Complications /Side effects/adverse reactions
- hypotension, bradycardia, constipation, blurred vision, confusion, sedation, respiratory depression, adrenal insufficiency, coma, seizures, bronchospasm, pulmonary edema, asthma exacerbation

Contraindications/Precautions
- acute or severe bronchial asthma in an unmonitored setting. products that contain tartrazine, bisulfites, or alcohol should be avoided in pts with known hypersensitivity, paralytic ileus
- personal or family hx of substance use or mental illness, head trauma, severe hepatic imparement, seizure disorder, severe pulmonary disease

Interactions
Drug-Drug: use with extreme caution in pt's recieving MAO inhibitors within 14 days prior, may result in unpredicable reactions. Drugs that affect serotonergic neurotransmitter systems like, tricyclic antidepressants, SSRIs, trazodone, mirtrazapine. mixed agonist/antagonists analgesics including nalbuphine, or butorphanol, and partial agonist analgesics including buprenorphine. may ↑ anticoagulant effect of warfarin

Drug-natural: kava-kava, valerian, chamomile

Evaluation of Medication Effectiveness
- Decrease in the severity of the pt's pain without significant change in level of consciousness or respiratory status
- Decrease in symptoms of pulmonary edema

Medication Administration
IV push: administer slowly at 2.5-15mg over 5mins, do not dilute prior to admin
- Larger doses may be required during chronic therapy

PO, Rect (adults ≥50kg): starting dose 30mg every 3-4hrs initally or once 24hr opoid requirement is determined ER capsules should not exceed 1600mg/day
IM, IV, subcut (adults ≥50kg): Starting dose 4-10mg every 3-4hr. MI - 8-15mg for very severe pain additional smaller doses may be given every 3-4 hrs
Epidural adults: 5mg/day do not exceed 10mg/day - intermittently

Nursing Interventions
- assess pt pain scale & score
- assess pt comfort
- assess pt alertness, need to use the bathroom
- ask the pt if they are having any suicidal thoughts or hx of depression
- monitor vitals,
- ascultate lung sounds

Client Education
- educate pt & family on how to identify respiratory distress (monitor HR, SpO_2, effort)
- may cause drowsiness or dizziness
- do not drink alcohol or use antidepressants
- call for assistance when trying to walk or get up
- take med as directed, it has abuse potential, never give it to anyone other than who it is prescribed for

ACTIVE LEARNING TEMPLATE: *Medication*

STUDENT NAME Emily Johnson

MEDICATION Oxycodone (Roxicodone, Roxybond, Xtampza ER) REVIEW MODULE CHAPTER _____

CATEGORY CLASS Therapeutic: Opioid analgesics pharmacologic: opioid Schedule II

PURPOSE OF MEDICATION

Expected Pharmacological Action

Alters preception of and emotional response to pain at spinal cord and higher levels of CNS by blocking release of inhibitory neurotransmitters, like acetylcholine and gamma-aminobutyric acid

Therapeutic Use / indications

Pain severe enough to require daily around the clock-long term opiod treatment for which alternative treatment

Complications / adverse reactions / side effects

CNS: abnormal dreams, anxiety, chills, dizziness, euphoria, seizures, syncope
CV: orthostatic hypotension, Bradycardia,
ENDO: adrenal insuffiency. Drug Tolerance
RESP: respiratory Depression. Anaphylaxis
• hyponatremia

Contraindications/Precautions 2.

4 • Some products contain alcohol, bisulfites & Should be avoided w/ pt's known intolerance & hypersensitivity. Pardlytic ileus, acute or & severe broncial atnsma
2nd • head trauma, ↑ intra cranial pressure, Severe hepatic imparement, hypothyroidism, seizure disorders

Interactions

• Drug-Drug: pts recieving MAO inhibitors- results in unpredicted reactions. mixed agonist/antagonist analgesics like nalbuphine may ↓ analgesic effects and/or precipitate opiod withdraw in physically dependent pts.
5-HT$_3$ receptor antagonists.

Medication Administration

• PO (adults) initial dose for 50-66%
• Larger doses may be required during chronic therapy. ER capsules are NOT bioequivalent to ER tablets
• PO (adults ≥50kg): 5-10mg every 3-4hrs PRN, PAS w/ chronic pain may be converted to a 24hr dose
• PO (adults <50kg) 0.2mg/kg every 3-4hr initially PRN, then converted to 24hr

Nursing Interventions

• Consider Lab tests for ↑ amylase & lipase
• frequent respiratory vitals
• Check med administration exaduratly

Client Education

• Explain theraputic value of med prior to administration
• Explain how drug can lead to abuse, addiction overdose

Evaluation of Medication Effectiveness

• decrease in pain score
• no respiratory depression or dizzyness reported

Preconference Form

Student Name: Emily Johnson

Medical Diagnosis/Disease: osteoarthritis

musculoskeletal system

NCLEX IV *(8)*: Physiological Integrity/Physiological Adaptation

NCLEX IV *(7)*: Reduction of Risk

Anatomy and Physiology

Normal Structures

made up of bone, joints, muscles, ligaments, tendons, cartilage. The purpose is to protect body organs, provide support and stability for the body, store minerals, and allow cordinated movement.

Bone: function is to support, protect internal organs, voluntary movement, blood cell production, and mineral storage. They allow the body to bear weight ect. bones serve a point of attachment for muscles and ligaments. muscles are connected to bones by tendons. Ligaments provide stability to joints, bone marrow contains the tissues responsible for making red and white blood cells & stores minerals like ~~calcium & phosphate~~. contains 206 bones in the body & are classified by shape

Pathophysiology of Disease

- osteoarthritis is the gradual loss of articular cartilage w/formation of bony out growths (spurs of osteophytes) at the joint margins
- genetic, metabolic, and local factors interact to cause cartilage deterioration from damage at the level of the chondrocytes. Cartilage becomes dull, yellow, and granular as OA progresses and continues to get softer & less elastic
- The body's attempts at repairing cartilage cannot keep up with the damage of OA. As cartilage structure changes, articular surfaces become cracked and worn. while central cartilage becomes thinner, cartilage at joint edges becomes thicker and osteophytes form. ~~joint surfaces become uneven~~, which affects distribution of stress across the joint and causes reduced motion

Anticipated Diagnostics

Labs

- CBC
- Synovial fluid assessment/analysis
- Liver function tests (BUN, creatinin)
- ESR Labs

Additional Diagnostics

- xrays
- bone scan
- CT scan
- MRI

NCLEX II *(3)*: Health Promotion and Maintenance

NCLEX IV *(7)*: Reduction of Risk

Contributing Risk Factors

- Aging
- joint instability
- mechanical stress
- hematologic or endocrine problems (chronic rheumatthrosis)
- trauma
- Drugs that stimulate collegen digesting enzymes in joint synovium

Signs and Symptoms

- joint pain
- Loss of function or disability
- hard to sit up or down
- joint stiffness
- joint swelling
- crepitation
- affects joints on only 1 side of body

Possible Therapeutic Procedures

Non-surgical

- accupuncture
- TENS
- physical therapy

Surgical

- reconstructive joint surgery
- hip & knee replacements

Prevention of Complications

(What are some potential complications associated with this disease process)

- avoid smoking
- promptly treat any joint injury
- maintain healthy weight & diet
- Exercise regularly, strength & endurance training

NCLEX IV *(6)*: Pharmacological and Parenteral Therapies

NCLEX IV *(5)*: Basic Care and Comfort

NCLEX III *(4)*: Psychosocial/Holistic Care Needs

Anticipated Medication Management

- nonsteroidal anti inflamatory drugs (NSAIDS)
- capsaicin cream
- Diclofenac gel
- intraarticular corticosteroid injections
- hyaluronic acid injections

Non-Pharmacologic Care Measures

- assistive & supportive devices
- Heat and cold therapy
- Exercise & activity modification
- weight management
- joint protection

What stressors might a patient with this diagnosis be experiencing?

- Pain during ADLS
- progress of treatment
- coming to terms that it is not curable

Client/Family Education

NCLEX I *(1)*: Safe and Effective Care Environment

List 3 potential teaching topics/areas

- demonstrate correct use of ambulatory devices
- educate on joint protection & safe environment at home
- encourage nutritional improvement

Multidisciplinary Team Involvement

(Which other disciplines do you expect to share in the care of this patient)

- rheumatologist
- occupational therapist
- orthosurgeon
- physical therapist
- family HCP

normal patho continued:

bone structure includes cortical (compact & dense) cancellous (spongy). The diaphysis is the main shaft of the long bone & the Epiphysis is the widened area at each end of the long bone. osteoclasts breakdown bone tissue. osteoblasts create & form bone. osteocytes are mature bone cells

Joints: a joint (articulation) is a place where the ends of 2 bones are close and move in relation to eachother. joints are classified by the movement they allow.
-diarthroidial (synovial) is the most common joint & most freely moveable.
a joint is enclosed in a capsule of fibrous connective tissue that joins two bones together to make a cavity. The capsule is lines by a synovial membrane that secrets synovial fluid that lubricates the joint to reduce friction that allows surfaces to slide smoothy

Cartilage:
3 types of cartilage include hayline, elastic, and fibrous. cartilage in synovial joints serves as support for soft tissue and provides articular surfaces for joint movement & protects underlying tissues. articular cartilage is avascular and must recieve nourishment by diffusion of material from synovial fluid. not having direct blood supply contributes to slow metabolism of cartilage cells & slow repair of cartilage tissue •functions as shock absorber

Muscle:
Cardiac, Smooth, and Skeletal muscle. Cardiac muscle is only found in the heart, contains spontaneous muscle contractions which are involuntary. Smooth muscle is found in airway, arteries, GI tract, bladder, and ureters and is controlled by hormonal & neuronal influenced muscle contractions. Skeletal muscle requires neuronal contractions and covers bones.

Ligaments & tendons:
composed of dense, fibrous, connective tissue with bundles of collegen fibers. tendons attach muscles to bones as an extension of the muscle sheath that adheres to the periosteum. Ligaments connect bones to bones & have a higher elastic content than tendons

disease patho continued:

Secondary Synovitis may occur when phagocytes try to rid the joint of small pieces of cartilage torn from the join surface. these changes cause early pain & stiffness Pain later on occurs when the articular cartilage is lost, and bony join surfaces rub eachother

Total Hip Arthroplasty research:

primary indications: End-Stage hip oa c̄ pain and functional loss after conservative care, inflammatory arthritis, hip fractures / deformity.
what is it?: A hip replacement & it is replaced c̄ a prosthetic joint made of metal, ceramic & plastic.
• The hip is a ball & Socket joint, the top of the thigh bone (femoral head = the ball) fits into a Socket in the pelvis (acetabulum)
• The Surgeon places a metal stem down into the thigh bone and Socket into pelvis after the removal of the diseased bones & joints & are fixed in place by cement or by creating a way that bone will grow into the surfaces
risks: infection, Dislocation, fracture during Surgery, differences in Leg length, damage to nerves & tissues around hip
recovery: physical therapy will be needed, assistive devices until able to ambulate alone, 1-2 nights or more in hospital post-surgery. older pts tend to take longer to recover