

Preconference Form

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Medical Diagnosis/Disease: Osteoarthritis and Total Hip Arthroplasty

NCLEX IV (8): Physiological Integrity/Physiological Adaptation

Anatomy and Physiology

Normal Structures

-The hip joint is a connection between the legs and torso. It's made up of the femur and pelvis. It is a ball and socket joint that helps to keep your body weight up and to move your legs. The hip is a major weight bearing joint.

-The hip joint consists of the pelvis and the acetabulum that holds the femoral head connected to the femoral neck which goes to the greater trochanter down to the femur. There is articular cartilage within the socket that helps to lubricate and decrease friction each time this joint moves.

-One of the largest joints in the body

-The ball and socket joint offers a wide range of motion and holds all the body's weight up. It can flex, extend, rotate, etc..

-The femur is a long bone which is the biggest bone in your body

-The hip joint has bones, cartilage which acts as a cushion, synovium that provides lubrication, and bursa which is fluid filled sacs that provide cushioning. Ligaments connect the femoral head to the acetabulum. Tendons connect the muscles to the bones and then muscle in the hip like gluteal, quadriceps, hamstrings, adductor muscles...

Total Hip Arthroplasty:

-This procedure is used when the disease is too far progressed and there is no other treatment options

- The surgeon will remove the damaged cartilage and bone (usually the femoral

Pathophysiology of Disease

-Gradual loss of articular cartilage with formation of bony outgrowths like spurs or osteophytes. This is not a normal part of the aging process. Cartilage destruction can start around ages 20-30... most adults are affected by age 40

-can be caused by a known event or condition or genetics

-The normal cartilage that is smooth and white becomes dull, yellow, and granular. It will become softer and less elastic and less able to resist heavy work and wear on the joints

-As the collagen structure in the cartilage changes, articular surface will become cracked and worn. While the central cartilage gets thinner, the edges become thicker, and osteophytes will form. The joint surface will become uneven which doesn't allow for stress to be evenly distributed.

- secondary synovitis can occur when phagocytes try to rid the joint of small pieces of cartilage torn from the joint surface. Pain will occur because of the bony joint surfaces rubbing together

-Usually affects one side of the body but not both

-Usually found in weight bearing joints, the metatarsophalangeal joint of the foot, lumbar vertebrae, and cervical, and joints of the fingers and thumb.

-Hyperplasia of synovium with inflammation

-Thickening of subchondral bone plate

-Development of subarticular bone cysts

NCLEX IV (7): Reduction of Risk

Anticipated Diagnostics

Labs

-CBC's

-CMP's

- erythrocyte sediment rate

Additional Diagnostics

-X-ray

-MRI

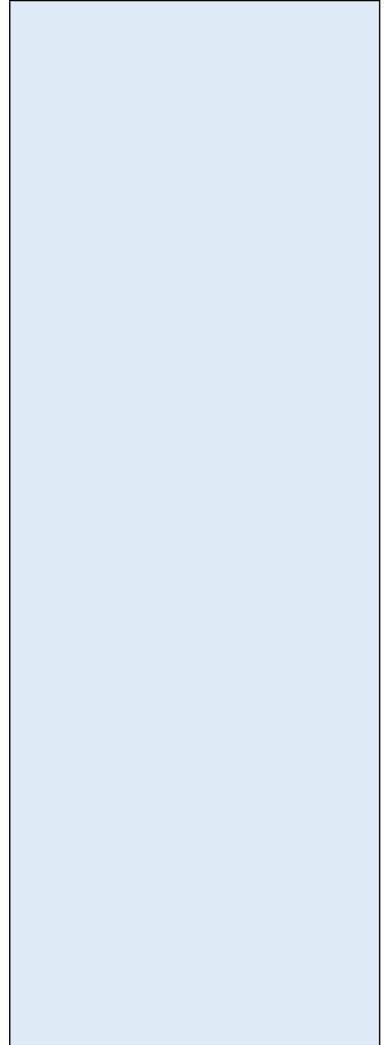
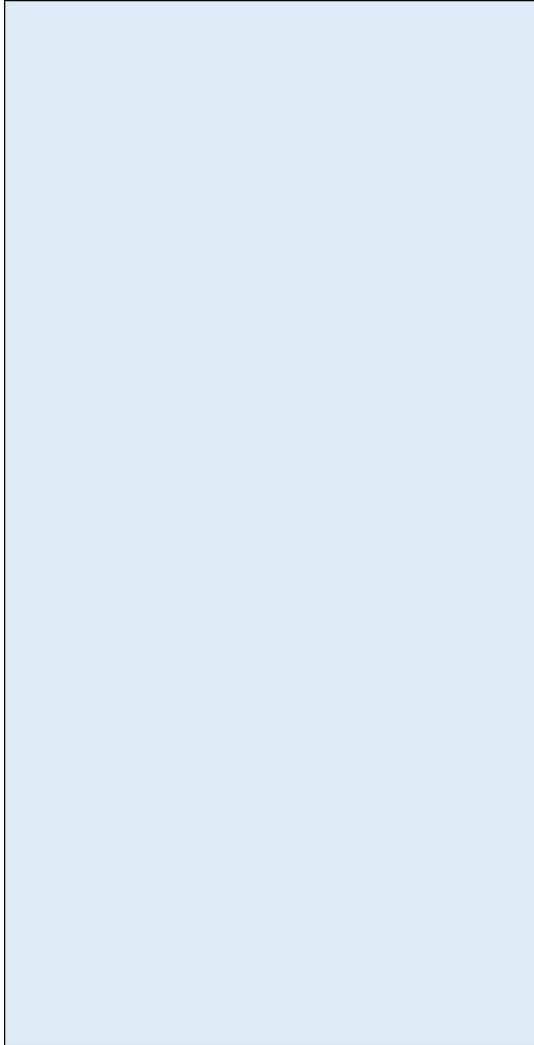
-Bone Scan

-History and Physical

-CT scan

-Synovial fluid analysis

head will be cut off)
 - A metal stem is placed into the hollow center of the femur, it is usually hammered into place
 -A ball is placed in the upper part and replaces the femoral head that is removed
 -The acetabulum is removed and replaced with a metal socket
 -A liner is inserted between the ball and the socket to ensure smooth surfaces
 -Client is put under anesthesia, procedure usually takes 1-2 hours



NCLEX II (3): Health Promotion and Maintenance

Contributing Risk Factors

- mechanical stress
- trauma
- hematologic or endocrine problems
- age
- gender
- smoking
- obesity/weight
- nutritional status
- menopause
- athletes

Signs and Symptoms

- pain
- stiffness of joints
- inflammation
- decreased range of motion
- tenderness at site
- fatigue
- crepitus
- usually affects weight bearing joints

NCLEX IV (7): Reduction of Risk

Possible Therapeutic Procedures

Non-surgical

- immobilization
- medication management like analgesics or NSAIDS
- intraarticular corticosteroid injections
- hyaluronic acid injections

Surgical

- Total hip arthroplasty or reconstructive surgeries (hip or knee

Prevention of Complications

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

- infection
- malunion or nonunion
- loss of joint function
- chronic pain
- disabilities
- falls
- muscle weakness
- depression/anxiety

replacements)

NCLEX IV (6): Pharmacological and Parenteral Therapies

Anticipated Medication Management

- Pain medications
- Antibiotics from surgery
- Anti-inflammatory medications
- Nutrition supplements
- NSAIDS
- Intraarticular corticosteroids

NCLEX IV (5): Basic Care and Comfort

Non-Pharmacologic Care Measures

- Ice Therapy
- Rest periods
- Early ambulation
- Pillows and cushions
- Positioning
- Deep breathing
- Assistive devices
- Nutrition and weight management
- Therapeutic exercise

NCLEX III (4): Psychosocial/Holistic Care Needs

What stressors might a patient with this diagnosis be experiencing?

- pain
- stress and anxiety
- immobility
- financial problems

Client/Family Education

List 3 potential teaching topics/areas

- Pain Management
- Risk for Falls, ways to prevent falls
- Timeline for recovery

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)

- Surgeons
- Nurses
- Family and friends (support)
- Radiology
- Nutrition
- Anesthesiology
- Case Management
- Physical Therapy
- Occupational Therapy