

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

Consists of the ball and socket joint formed by the femur and the pelvis. The pelvis is made up of the ilium, ischium, and pubis. The hip is stable structure that is held together by several ligaments and cartilage. In the socket joint that is synovial fluid and that is use for lubrication when the bones are moving. The femoral head and acetabulum are what are covered with articular cartilage. The hip is a ball and socket joint, the head of the femoral bone goes and sits into the acetabulum.

Pathophysiology of Disease

OA involves the gradual loss of articular cartilage with formation of bony outgrowths (spurs or osteophytes) at the joint margins. Genetic, metabolic, and local factors interact to cause cartilage deterioration from damage at a level of the chondrocytes. Cartilage bone becomes dull, yellow, and granular cartilage becomes softer, less elastic. The body's attempts at cartilage repair cannot keep up with the destruction of OA. As the collagen structure in the cartilage changes, articular surfaces become cracked and worn. While central cartilage becomes thinner, cartilage at the joint edges becomes thicker and osteophytes form. Joint surfaces become uneven, affecting the distribution of stress across the joint and causing reduced motion.

NCLEX IV (7): Reduction of Risk

Anticipated Diagnostics

Labs

No laboratory test can be used to diagnose OA.

Additional Diagnostics

X-rays, CT, MRI, Synovial fluid analysis

NCLEX II (3): Health Promotion and Maintenance

Contributing Risk Factors

Obesity, age, trauma, drugs, joint instability, mechanical stress, skeletal deformities

Signs and Symptoms

Joint pain, red, swollen, tender, stiffness, crepitus, reduced range of motion, bony growths

NCLEX IV (7): Reduction of Risk

Possible Therapeutic Procedures

Non-surgical

Acupuncture, nutrition supplements

Surgical

Reconstructive surgeries

Prevention of Complications

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

Joint deformity
Muscle weakness
Bone spurs
Joint infection

NCLEX IV (6): Pharmacological and Parenteral Therapies

Anticipated Medication Management

Nonsteroidal anti-inflammatory drugs, capsaicin (topical agent)

NCLEX IV (5): Basic Care and Comfort

Non-Pharmacologic Care Measures

Ice if the patient has acute inflammation, heat therapy for when the patient has stiffness, hot packs, whirlpool baths

NCLEX III (4): Psychosocial/Holistic Care Needs

What stressors might a patient with this diagnosis be experiencing?

Treatment, not knowing how to manage it, symptoms worsening, new physical limitations, feeling fatigued often, having to make lifestyle changes

Client/Family Education

NCLEX I (1): Safe and Effective Care Environment

List 3 potential teaching topics/areas

- How to help decrease pain on your own when it flares up along with new assistive devices

- How to control your osteoarthritis and what you can do to manage and keep it from progressing, body mechanics

- What causes osteoarthritis and what happened for it to get to that stage

Multidisciplinary Team Involvement

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

Internal medicine physician, or family HCP, a rheumatologist, occupational therapist, physical therapist