

ACTIVE LEARNING TEMPLATE: *Basic Concept*

STUDENT NAME _____

CONCEPT **Arthroplasty**

REVIEW MODULE CHAPTER **68**

Related Content

(E.G., DELEGATION,
LEVELS OF PREVENTION,
ADVANCE DIRECTIVES)

Arthroplasty, which is the surgical removal of a diseased joint due to osteonecrosis, osteoarthritis, arthritis rheumatoid arthritis, trauma, or congenital anomalies, and replacing it with prosthetics or artificial components made of metal and/or plastic.

Total knee arthroplasty involves the replacement of the distal femoral component, the tibia plate, and the patellar button. It is a surgical option when conservative measures fail. Unicondylar knee replacement is done when a client's joint is diseased in one compartment of the joint.

Total hip arthroplasty involves the replacement of the acetabular cup, femoral head, and femoral stem. Hemiarthroplasty refers to half of a joint replacement. Fractures of the femoral neck can be treated only with the replacement of the femoral component.

Underlying Principles

The goal of arthroplasty is to alleviate pain, restore joint movements, and improve the patient's functional status and his/her quality of life.

Knee and hip arthroplasty treats degenerative diseases such as osteoarthritis and rheumatoid arthritis. Osteonecrosis is a necrosis of the bone due to lack of adequate blood supply caused by chronic steroid use or trauma.

patients may present with different signs and symptoms such as Pain when bearing weight on the joints, walking or running, joint crepitus and stiffness joint swelling which primarily occurs in the knees.

Arthroplasty should be avoided the patients with recent or active infection which can cause micro-organisms to disseminate to the surgical site and cause the prosthesis to fail, impaired arterial blood flow to the affected extremity, if the client is unable to follow the postsurgical regimen and in case of a comorbid condition like uncontrolled diabetes mellitus or hypertension, advanced osteoporosis, progressive inflammatory condition and unstable cardiac or respiratory conditions.

Nursing Interventions

WHO? WHEN? WHY? HOW?

Before the procedure the nurse should be able to review the diagnostic test results such as; complete blood count(CBC), urinalysis, electrolytes, blood urea nitrogen (BUN), and creatinine. Assess the client's surgical readiness, and rule out anemia, infection, or organ failure. For chest x-ray, rule out pulmonary surgical contraindications like infection or tumor. For echocardiogram (ECG), gather baseline rhythm to identify cardiovascular surgical contraindications such as dysrhythmias. Post the procedure, it's the nurse's responsibility to make sure that the client requires extensive physical therapy to regain mobility. The client can be discharged home or to an acute rehabilitation facility. If discharged home, outpatient or in-home therapy must be provided. Home care should be available for 4 to 6 weeks. Monitor for evidence of incisional infection such as fever, increased redness, swelling and purulent drainage. Care for the incision should be clean daily with soap and water. Also the nurse monitor for deep vein thrombosis, swelling, redness, pain in calf, pulmonary embolism shortness of breath, chest pain, and bleeding if the client is taking an anticoagulant.