

NURSING CARE OF THE CLIENT HAVING TOTAL JOINT REPLACEMENT

PREOPERATIVE CARE

- Assess the client's knowledge and understanding of the planned operative procedure. Provide further explanations and clarification as needed. *It is important that the client have a clear and realistic understanding of the surgical procedure and expected results. Knowledge decreases anxiety and increases the client's ability to assist with postoperative care procedures.*
- Obtain a nursing history and physical assessment, including range of motion of the affected joints. *This information not only allows nurses to tailor care to the needs of the individual but also serves as a baseline for comparison of postoperative assessment data.*
- Explain necessary postoperative activity restrictions. Teach how to use the overhead trapeze for changing positions. *The client who learns and practices moving techniques before surgery can use them more effectively in the postoperative period.*
- Provide or reinforce teaching of postoperative exercises specific to the joint on which surgery is to be performed. *Exercises are prescribed postoperatively to (a) strengthen muscles providing joint stability and support, (b) prevent muscle atrophy and joint contractures; and (c) prevent venous stasis and possible thromboembolism.*
- Teach respiratory hygiene procedures such as the use of incentive spirometry, coughing, and deep breathing. *Adequate respiratory hygiene is imperative for all clients undergoing joint replacement to prevent respiratory complications associated with immobility and the effects of anesthesia. In addition, many clients undergoing total joint replacement are elderly and may have reduced mucociliary clearance.*
- Discuss postoperative pain control measures, including use of patient-controlled analgesia (PCA) or epidural infusion as appropriate. *It is important for the client to understand the purpose and use of postoperative pain control measures to allow early mobility and reduce complications associated with immobility.*
- Teach or provide prescribed preoperative skin preparation such as shower, shampoo, and skin scrub with antibacterial solution. *These measures help reduce transient bacteria that may be introduced into the surgical site.*
- Administer intravenous antibiotic as ordered. *Antibiotic therapy is initiated before or during surgery and continued postoperatively to further reduce the risk of infection.*

POSTOPERATIVE CARE

- Check vital signs, including temperature and level of consciousness, every 4 hours or more frequently as indicated. Report significant changes to the physician. *These routine assessments provide information about the client's cardiovascular status and can give early indications of complications such as excessive bleeding, fluid volume deficit, and infection.*
- Perform neurovascular checks (color, temperature, pulses and capillary refill, movement, and sensation) on the affected limb hourly for the first 12 to 24 hours, then every 2 to 4 hours. Report abnormal findings to the physician immediately. *Surgery can disrupt the blood supply to or innervation of the af-*

- ected extremity. If so, rapid intervention is important to preserve the function of the extremity.*
- Monitor incisional bleeding by emptying and recording suction drainage every 4 hours and assessing the dressing frequently. *Significant blood loss can occur with a total joint replacement, particularly a total hip replacement.*
- Reinforce the dressing as needed. *The dressing is usually changed 24 to 48 hours after surgery but may need reinforcement if excess bleeding occurs.*
- Maintain intravenous infusion and accurate intake and output records during the initial postoperative period. *The client is at risk for fluid volume deficit in the initial postoperative period because of blood and fluid loss during surgery, as well as the effects of the anesthetic.*
- Maintain bed rest and prescribed position of the affected extremity using a sling, abduction splint, brace, immobilizer, or other prescribed device. *Proper positioning of the affected extremity is vital in the initial postoperative period so that the joint prosthesis does not become dislocated or displaced.*
- Help the client shift position at least every 2 hours while on bed rest. *Shifting of position helps prevent pressure sores and other complications of immobility.*
- Remind the client to use the incentive spirometer, to cough, and to breathe deeply at least every 2 hours. *These measures are important to prevent respiratory complications such as pneumonia.*
- Assess the client's level of comfort frequently. Maintain PCA, epidural infusion, or other prescribed analgesia to promote comfort. *Adequate pain management promotes healing and mobility.*
- Help the client get out of bed as soon as allowed. Teach and reinforce the use of techniques to prevent weight bearing on the affected extremity, such as the over-head trapeze, pivot turning, and toe-touch. *Early mobility prevents complications such as pneumonia and thromboembolism, but appropriate techniques must be used to prevent injury to the operative site.*
- Initiate physical therapy and exercises as prescribed for the specific joint replaced, such as quadriceps setting, leg raising, and passive and active range-of-motion exercises. *These exercises help prevent muscle atrophy and thromboembolism and strengthen the muscles of the affected extremity so that it can support the prosthetic joint.*
- Use sequential compression devices or antiembolism stockings as prescribed. *These help prevent thromboembolism and pulmonary embolus for the client who must remain immobile following surgery.*
- For the client with a total hip replacement, prevent hip flexion of greater than 90 degrees or adduction of the affected leg. Provide a seat riser for the toilet or commode. *These measures prevent dislocation of the joint.*
- Assess the client with a total hip replacement for signs of prosthesis dislocation, including pain in the affected hip or shortening and internal rotation of the affected leg.

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- For the client with a total knee replacement, use a continuous passive range-of-motion (CPM) device or range-of-motion exercises as prescribed. *Dislocation is not a problem with a knee replacement, and more emphasis is placed on range-of-motion exercises in the early postoperative period.*
- Maintain fluid intake and encourage a high-fiber diet. Administer stool softeners or rectal suppositories as needed. *Immobility contributes to the potential problem of constipation; these measures help maintain regular fecal elimination.*
- Encourage consumption of a well-balanced diet with adequate protein. *Adequate nutrition promotes tissue healing.*
- Teach or reinforce postdischarge exercises and activity restrictions. Emphasize the importance of scheduled follow-up physician visits. *Clients are discharged from the acute care facility before healing is complete. Exercises are prescribed and activities are resumed gradually to protect the integrity of the joint replacement and prevent contractures.*
- For those clients needing additional direct care after discharge, arrange placement in a long-term care or rehabilitation facility. *Activity restrictions may preclude discharge to home for some clients.*
- Make referrals as needed to home health agencies and physical therapy. *Clients often require home health care for both nursing care needs and continued physical therapy following discharge from acute or long-term care.*