

Discussion of management for hip replacement surgery patients nursing essay



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According to the Scottish Arthroplasty Project's annual report (2009), 6312 total hip replacement operations were carried out in 2007/08. (Scottish Arthroplasty Project, 2009).

This essay will discuss and justify the management required for patients who undergo total hip replacement surgery, during the first 72 hours post operatively. It will include information on the current evidence base for post operative care, using guidelines and policies and will show how early post operative management will allow the patient to fulfil their activities of daily living. It will also show how the patient can return to normal by using the Roper, Logan and Tierney model of nursing care. Preventing post operative complications is the most important goal in the post operative stage. A major element of the nurse's role in the post operative period is to diagnose, monitor and intervene in rapidly changing situations so complications do not arise.

Hip replacement surgery is commonly carried out when patients suffer from chronic pain, immobility and deformity. These symptoms are mainly caused by osteo-arthritic changes in the joint, and affect all activities of daily living (Temple, 2004). The procedure is normally carried out under general anaesthetic (being 'put to sleep') or by spinal (epidural) anaesthetic. It is done by completely removing the old hip joint and replacing it with prosthetic parts (NHS, 2010).

Osteoarthritis is a disease that affects joints in the body and is characterized by damage to the surface of the joint. When a joint develops osteoarthritis, the articular cartilage which is found on the ends of bones, gradually

roughens and becomes thin. The bone underneath thickens and becomes more rough (University of Dundee, 2009). The bone at the edge of the joint grows outwards forming osteophytes or bony spurs. This new bony tissue could be the body's attempt to repair the damage to the cartilage. Friction against the osteophytes generates particles of articular cartilage which are shed into the joint. These particles are then taken into the synovium and trigger an inflammatory response. Irritation due to the release of inflammatory enzymes causes extra fluid to be formed which leads to joint swelling. In severe osteoarthritis, the cartilage can become so thin that it no longer covers the thickened bone ends. The bone ends touch, rub against each other, and start to wear away. The loss of cartilage, the wearing of bone and the bony overgrowth at the edges can alter the shape of the joint, forcing the bones out of their normal alignment, causing deformity and pain (Arthritis Research UK, 2010). The cause of osteoarthritis is unknown but there are several risk factors which include gender, age, obesity and genetic influences (Waugh and Grant, 2006).

Post operative care is defined as the care that is given between 24 hours and 30 days after surgery (Hutton and Cooper, 2002). Post operative care is essential to ensure the patient fully recovers from the surgery and is able to return to normal capacity as soon as possible, without complications. Kontoyannis (2008) suggests that the " post operative period is very important for monitoring the patient to prevent immediate and long term complications."

Kozier et al (2008) states that " nursing during the post operative phase is especially important for the patient's recovery".

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Post operative care can be divided into three main categories – assessment, monitoring and management. According to the Scottish Intercollegiate Guidelines Network (SIGN) “ regular assessment, selective monitoring and timely documentation are key to post operative care” (SIGN, 2004).

The first post operative assessment should take place immediately when the patient comes back from operating theatre. As soon as the patient returns to the ward, the nurse makes a very quick assessment of the patient’s condition. Criteria for assessment include respiratory, circulatory, neurological, dressing, patient comfort and safety (Long et al 1993).

This assessment means that a baseline can be determined, the nurse can then record any changes in the patient’s condition from when they left the operating theatre and any problems can be identified quickly. The nurse has the responsibility to inform the doctor of any information about the patient’s condition when the first post operative assessment is being carried out. The Nursing and Midwifery Council (NMC) Code of Conduct states that nurses must “ share information with your colleagues” so that they can “ protect and promote health and well-being of those in your care” (NMC, 2007).

During the first post operative assessment, after the nurse has received a hand over from the theatre nurse, the patient will arrive back at the ward with an intravenous infusion. They might also have a PCA (patient controlled analgesia) and drain (Pudner, 2005). The nurse will monitor the patient’s vital signs, drain site and assess for pain.

Monitoring allows the gathering of information so that trends may be determined. This means that any worsening or progression in the patient’s

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condition can be recognised. Monitoring is essential to determine if the patient is responding to the treatment. The normal monitoring regime for any post operative patient includes: temperature, pulse rate, blood pressure, respiratory rate and oxygen saturation levels. These observations should be recorded and documented at 30 minute intervals, progressing to 4 hourly for the duration of the patients stay in hospital, unless the patient's condition dictates otherwise.

Respiratory assessment is paramount to the post operative care of a patient. The nurse must observe the rate of and depth of the respirations. Pain increases the rate and depth; therefore if the patient is short of breath, a pain assessment should be carried out (Heath, 2004).

The nurse should also assess cardiovascular activity. They should note and seek further advice if the patient is hypertensive, tachycardic or bleeding.

From these observations, it can be determined if the patient is suffering from shock associated with pain or excessive blood loss.

Other monitoring requirements that post operative hip replacement patients receive would be pain assessment and observations on the operated leg, for example, colour, movement and sensation. This is to check for circulatory and nerve damage (Temple, 2004). This neurovascular assessment should be carried out and documented at 30 minute intervals, progressing to 4 hourly for at least 24 hours after surgery (Pudner, 2005).

The level of consciousness can be assessed by asking the patient to respond to questions and commands. If the patient cannot communicate clearly or is

finding it difficult to concord with commands, the doctor should be informed immediately. Low levels of consciousness might indicate that the patient is suffering from shock or they have not recovered from anaesthetic (Long et al, 1993). The assessment tool used for measuring consciousness is AVPU (Alert, Verbal, Painful, Unresponsive). This is used to determine whether the patient is alert and fully conscious or only responds to verbal, painful stimuli or is fully unresponsive (SIGN, 2004).

The nurse should assess the operation site quickly, without causing pain and observe the dressing. In the immediate post operative period, the nurse is responsible for observing the wound site at frequent intervals. If it is expected that fluid may collect in the hip area, a drain will be inserted to let the fluid escape (Long et al, 1993). If there is a drain present, the type and quantity of fluid should be observed and documented. If drainage from the wound is excessive the operation site would need to be examined. Chrintz et al (1989) states that in wounds that heal by first intention, the dressing can ideally be removed after 24-48 hours and need not be replaced. Kozier et al (2008) also say that the dressing should be left for “ at least 24 hours” but only if there is no signs of excessive bleeding or drainage. However, Pudner (2005) maintains that the dressing is “ usually taken down after 24 hours to leave the primary dressing exposed”. Wilson (1995) proposes that “ repeated exposure of the wound within 48 hours of surgery increases the risk of the patient developing a wound infection”.

Whilst the nurse is involved in monitoring physiological changes, maintaining dignity and comfort of patients is also an integral aspect of caring for any patient. The NMC Code of Professional Conduct states that as a nurse “ you <https://assignbuster.com/discussion-of-management-for-hip-replacement-surgery-patients-nursing-essay/>

must treat people as individuals and respect their dignity” (NMC, 2007).

Patient comfort and safety is imperative for the recovery from the operation and healing of the wound. To prevent unnecessary pain, it is important that the patient is comfortable and that they are positioned appropriately, using pillows between the legs so as not to dislocate the new hip joint. Providing comfort to the patient eases their physiological and psychological distress and pain. Comfort strategies include; hydration and elimination, nutrition, effective analgesia, personal hygiene, listening and being there for the patient/family, effective communication and treating the patient as an individual. Patients and their carers feel empowered and cared for, which improves the nurse-patient relationship (Manley and Bellman, 2000).

Assessing pain is essential for providing comfort for the patient.

Pain assessment should be carried out whenever the vital signs are being monitored. It is essential that the nurse assesses the site, nature and severity of the patient’s pain in order to choose the most suitable treatment.

To assess pain, there are several tools that can be used. The most common being a numerical rating scale. The patient can score their pain on a scale of 1 to 10, 10 being the worse pain they can imagine (Manley and Bellman, 2000). When assessing pain, it is important to listen to what the patient is saying. A study by Seers (1987) showed that nurses persistently record the patients pain score to be significantly lower than the patient’s own assessment.

Opioid analgesics are the most commonly used analgesic for routine post operative pain relief. Examples of opioid analgesics include morphine,

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diamorphine and pethidine. The main side effects of opioid analgesics are respiratory depression, reduced gastrointestinal motility and nausea. The nurse needs to continually reassess respiratory rate, nausea and bowel movement when the patient is using opioids (Manley and Bellman, 2000). If the patient is experiencing nausea and/or vomiting, then an anti-emetic (anti sickness) drug such as metoclopramide can be prescribed.

It is also very important to prevent potential infection. To prevent the potential for infection, it is important to follow hand hygiene policies and to use aseptic technique whenever there is a dressing change or when touching the skin around the operation site (Pudner, 2005). This breaks the chain of infection at the mode of transmission so therefore the infective agent should not be able to reach the site of entry and the patient should not acquire an infection.

There is also the potential for pressure area sores to develop and this must be assessed as the patient's mobility will be reduced. A tool such as the waterlow scoring system helps to identify patients who are at a risk of developing pressure sores and the nurse will be able to monitor and intervene as required. The nurse has to encourage the patient to mobilise so as to prevent the potential pressure sores developing (Pudner, 2005).

When assessing the patient, the Roper, Logan and Tierney model of nursing care is commonly used. This model of care is based on what is perceived to be the 12 activities of daily living, which are related to basic human needs; maintaining a safe environment, communicating, breathing, eating and

drinking, eliminating, personal hygiene, controlling body temperature, mobilising, working and playing, expressing sexuality, sleeping and dying.

To maintain a safe environment for the post operative hip replacement patient it is important to prevent dislocation of the hip prosthesis. This is done by ensuring that the patient does not flex the hip at an angle of 90° or more, ensuring that the patient uses a high toilet seat whilst in hospital and has one for discharge, that they do not cross their legs and encouraging mobilisation to strengthen muscles around the joint.

To prevent dislocation of the new hip joint, an abduction wedge or gutter splint should be used between the legs for the first 24 hours and at night until the patient is discharged to stop the patient crossing their legs (Pudner, 2005).

Nurses need to assess the patient for fluid balance, especially if they are on an intravenous infusion. Intravenous infusions are normally prescribed for patients after oral fluids have been withheld due to surgery. Fluid balance records should be documented every hour for patients who have a urinary catheter and/or a drain in situ. When the patient's catheter is removed, they are encouraged to pass urine. This is important because the surgery has been carried out on the lower limbs and it shows that the body has recovered from the anaesthetic and there has been no damage to the urinary system nerves during surgery. Anaesthetic may affect the bladder tone and consequently makes micturition difficult.

Adequate sleep and rest aid recovery from surgery. Sleep disturbance and deprivation can be caused by pain, difficulty obtaining a comfortable
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position, siting of intravenous infusions or drains and being in a strange environment.

Possible complications that could arise from total hip replacement surgery include; dislocation of the hip joint, excessive wound drainage, thromboembolism, infection, pressure ulcer development, heterotopic ossification (formation of bone in the periprosthetic space), deep vein thrombosis (due to decrease in mobility), necrosis (bone death caused by lack of blood supply) and loosening of the prosthesis (Smeltzer et al, 2004).

The nurse should be aware of the possible complications that could arise from this type of surgery and should follow guidelines on how to deal with these should they occur. Hip replacement patients are at an increased risk of developing deep vein thrombosis due to the bed rest and blood pooling in the lower legs after surgery. Early rehabilitation of exercise and movement of the legs helps prevent deep vein thrombosis occurring and is recommended for all patients (Smeltzer et al, 2004).

Patients who have suffered from immobility which was caused by osteoarthritic changes in their hip joint may have suffered from social exclusion. This in turn means that their self esteem is altered as they have not been able to socialise with their peers. The nurse can ask the patient if they would like social work to be involved in their discharge and social work can then help the patient return in their socialisation within the community.

Health promotion is also a vital part of post operative management for patients. Patients need to be educated on what is best for their new hip joint in terms of exercise, diet and lifestyle choices before they are discharged

from the hospital. Education about changing their lifestyle is important to prevent any other problems that may occur later on. Nurses can give patients smoking cessation advice and can help with exercise, by referring the patient to physiotherapy if required. Dietary advice can be given to the patient and if the need demands, referral to dietician may be appropriate. This includes dietary information and advice for patients who are overweight, as this can result in more severe osteoarthritic changes due to excess weight on the hip joint.

Much nursing research in the past 20 years has stressed the importance of patient education as an element of health promotion. The involvement of patients in the management of their care is desirable to their recovery. Promoting health post operatively is not only about providing information. Health promotion must be perceived as an element of health care in which nurses seek to enable the patient to take control over their own lives and health through processes of education.

Normally patients who undergo hip replacement surgery are discharged home after 3 - 5 days (NHS, 2010). The nurse has to ensure that the patient is discharged home with correct medication, including pain relief and previous medication and that the patient has received a discharge letter which they should give to their GP.

To conclude, using the current evidence base from Scottish Intercollegiate Guidelines Network (SIGN, 2004), and use of current NHS policies and guidelines, post operative care is essential to healing from the operation and gives the patient the best possible chance from recovering fully. Continually

monitoring the patient post operatively gives the nurse useful information about how the patient is progressing or deteriorating and can then act accordingly, following specific national guidelines.

Following the information and standards set by bodies such as the Nursing and Midwifery Council and SIGN gives the nurse the evidence base for which they should be using when caring for patients who have undergone total hip replacement surgery. Well informed nurses use this best practice to give patients the best possible care and can prevent potential problems and complications if following them correctly.