Aspect of care essay: the post-operative care following a hysterectomy and bilate...

Approximately 60, 000 hysterectomy operations are performed each year (NHS Direct, 2002).

Despite being a common surgical procedure the rate of post-operative complications had been reported to be 40 -50% (Schofield et al, 1991). Hysterectomy affects many aspects of a woman's health and involves a complex interaction of biological, psychological and social factors. Holistic health and social care is therefore essential to the identification of a patient's care needs and is an important factor in their successful recovery. This essay will analyse the care needs of a patient recovering from a total abdominal hysterectomy and bilateral salpingo-oophorectomy seen during a clinical placement. It will examine the wards use of a nursing model and integrated care pathway in caring for a patient after surgery.

The care given during the postoperative period will also be described and will focus on the monitoring for post-operative respiratory and circulatory complications, monitoring for signs of infection, pain and anxiety management, wound care, prevention and treatment of constipation, patient education and the involvement of the patient's family on discharge. The names of the patient and her daughter-on-law have been changed to preserve confidentiality (NMC, 2002). Chloe Bower, an 81-year-old female, with known uterine cancer, was admitted to a gynaecological ward for elective surgery. She was booked to have a total abdominal hysterectomy and bilateral salpingo-oophorectomy (BSO), a surgical procedure that removes the uterus, cervix, fallopian tubes and ovaries (Norris, 1994).

Four months early Chloe had experienced moderate vaginal bleeding and lower abdominal pain. She was referred by her GP to the hospital's gynaecological out patient service. Upon further investigation she was diagnosed with uterine cancer. Chloe's past medical and surgical history included osteoarthritis, which affects her knees and an appendectomy 40 years ago.

Chloe's husband died 5 years ago and she lives alone. Her two sons and daughter live close by and a family member visits her at least once a week. The pre-op clerk nurse carried out Chloe's nursing assessment a week before her surgery. The ward uses the Roper, Logan, Tierney (RTL) model as a basis for patient assessment and the model has been used to create the ward's nursing assessment document. The RTL model is based on 12 activities of daily living (e.

g. breathing, sleeping, elimination etc) and looks at how independent a person is at performing those activities (Roper el al, 1996). The model encourages the examination of all factors, which can affect health. These factors can be biological, psychological, sociocultural, environmental and politicoeconomic in nature (Roper et al, 1996).

Standard assessment tools have also been incorporated into the assessment document such as the Waterlow score (assessment of pressure sore risk) and nutrition risk score. Nursing models, like RLT, show relationships between concepts of nursing and provide a framework to explain nursing activities (Roper el al, 1996). Many nursing models assert holistic care principles and moves nursing practice away from a biomedical focus to one that is focused

on all factors affecting an individual’s health and includes the concept of health promotion and social care (Tierney, 1998). However, despite their popularity, there is a lack of research into the effectiveness of nursing models used in clinical practice (Wimpenny, 2002). Tierney (1998) also reports that nurses find it difficult to categorise patient problems, such as pain and bleeding, within the 12 activities of daily living.

For surgical procedures the ward also uses integrated care pathways (ICP). An ICP is an outline of anticipated care needs related to specific conditions or procedures such as surgery (Middleton et al, 2003). The wards ICP for total abdominal hysterectomy covers the whole process, from the pre-operative assessment through to discharge from hospital. It provides a checklist of care to be given and includes protocols for vital sign monitoring, catheter removal, pain assessment and management and the prevention of deep vein thrombosis.

As well as giving instructions for the expected physical care needs of the patient, the ICP also includes anticipated psychological and social needs of the patient. For example, a section on patient teaching and support emphasises the importance of keeping patients informed of their progress plan. It also includes a section on discharge planning in the form of a checklist covering tasks such as issuing sick certificates, booking transport and arranging out patient appointments. (RBH, 2002). Chloe returned to the ward approximately two hours after she had left for theatre. She was attached to a Patient Controlled Analgesic syringe driver (PCA), had a foley catheter and an intravenous infusion of normal saline.

Her wound was dressed with a large Mepore dressing and a maternity pad was placed in her perineum. After being transferred to her bed, Chloe was made comfortable and assisted into a position that relieved her pain. Following the ICP, Chloe was regularly monitored for signs of respiratory and circulatory problems, shock, deep vein thrombosis, infection, pain, anxiety, nausea, bowel obstruction and constipation. After receiving a general anaesthetic, patients are at risk of developing respiratory problems.

Hypoventilation can occur from the use of opiates, inhalation agents, barbiturates and muscle relaxant drugs used in theatre (Mallet ; Dougherty, 2000). In addition to this, Chloe was at greater risk of developing respiratory complications because of her age. This is due to the normal physiological changes of aging resulting in a reduction in the efficiency of the respiratory system (Fraser, 1997). Chloe’s respiratory muscles were weaker than a younger patient’s and her cough reflex would have decreased with age.

Therefore a regular assessment of her respiratory function was important. During her post-operative period Chloe maintained adequate ventilation. She received oxygen therapy at 5 litres per minute via a facemask for 24 hours after the operation. Chole’s airway patency, respiration rate, depth and rhythm, oxygen saturation, colour, mental state and general condition were assessed every 30 minutes, for the first two hours post-operatively, and then reduced to every hour. Once the nurse was satisfied that her respiratory system was stable, observations where reduced. As well as prescribing the frequency of vital sign monitoring, the ICP states that all patients should be sat up, when possible, and also encouraged to breathe deeply.

When Chloe was fully awake she was also encouraged to sit upright in bed to optimise ventilation (Baillie et al, 2001). Her nurse and myself periodically encouraged her to breathe deeply. Pre-operatively, the ward's Physiotherapist explained the importance of coughing to clear her lungs and to prevent respiratory complications. She showed Chloe how to cough in a way that would reduce pain and discomfort by splinting her wound with her hand or a pillow and bending her knees upwards if she was lying on her back. Patients are also at risk of shock after surgery as a result of haemorrhage, fluid loss and infection. Shock is described as a life threatening condition resulting from inadequate supplies of oxygen and nutrients to body tissue and organs (Alexander et al, 1994, cited in Collins, 2000).

Signs of shock include a drop in blood pressure, rapid weak pulse, oliguria, ashen complexion, restlessness and anxiety (Collins, 2000). To monitor for shock, Chloe's pulse and blood pressure was monitored every 30 minutes until the nurse was satisfied that the readings were stable. Chloe's wound dressing and maternity pad was regularly checked for bleeding. A small amount of ooze on her dressing was noted on her return to the ward, however this bleeding stopped within 30 minutes, was small in volume and did not compromise her haemodynamic stability.

During her stay in hospital, Chloe was at risk of developing deep vein thrombosis. Incidences of deep vein thrombosis are highest in middle-aged and elderly patients (Mallet ; Dougherty, 2000). Age-related changes in veins result in a slower venous return, which can result in venous stasis (Saxon ; Etten, 1994). Lack of mobility can also increase the risk of DVT (Mallet ;

Dougherty, 2000). Because of her operation, Chloe was less mobile, initially due to the sedative affects of the anaesthesia and morpine.

Later, pain from her surgical incision deterred Chloe from regaining her preoperative mobility levels. To reduce Chloe’s risk of developing DVT, the ICP included a detailed prevention protocol. Pre-operatively she was asked to wear thromboembolic deterrent stockings (TEDs) for the duration of her hospital stay and postoperatively was administered sub-cutaneous heparin. Heparin is used to reduce blood clotting (Sparks, 1996) and is commonly used to prevent and treat cases of DVT (Amaragiri & Lee, 2004). Amaragiri & Lee (2004) found that the effectiveness of anticoagulant drugs is increased if the patient wears TEDs.

TEDs work by mimicking deep leg vein calf muscle pumps and encourage venous return back up the leg (Wallis & Autar, 2001). Chloe was also encouraged to mobilise as much as her pain would allow. Whilst she was resting in bed, she was asked to keep her legs uncrossed and she was encouraged to wiggle her feet and flex her legs every hour. The physiotherapist showed her less painful methods of getting out of bed and transferring from bed to chair. By day 3 post-operatively Chloe could walk from her bed to the bathroom using only her walking frame.

By day 5 postoperatively the nurse decided that Chloe was mobilising enough to promote effective venous return and the heparin injections were discontinued. Another potential post-operative complication was infection. Hysterectomy operations are associated with a high infection risk (Marjoribanks et al, 2004). Chloe was at risk from developing an infection

from her operation site, IV cannula and Foley catheter. Because of Chloe's increased risk of infection, her doctor prescribed prophylaxis intravenous antibiotics. This practice is recommended in national guidelines for all types of hysterectomy has been estimated to more than halve the rate of postoperative infections (Duff, 1980 ; Mittendorf, 1993, cited in Marjoribanks et al, 2004).

A protocol for the administration of prophylaxis antibiotics and regime of monitoring for signs of infection was included in the ICP. Chloe's antibiotics were administered every 12 hours for four days via her cannula. To monitor for signs of infection, her temperature was taken every 4 hours during her stay in hospital, her wound and cannula site were inspected at least once per shift for signs of erythema, oedema, pain and localised surface temperature increase. A full blood count was also taken on day 1 post-op to look for leukocytosis.

An accurate assessment and management of Chloe's pain was vital to her recovery. Poorly controlled pain and can result in immobility, sleeplessness and anxiety, which can led to further complications such a DVT and fatigue (Carr, 2001). Every hour (for the first 12 hours) either the nurse of myself asked how Chloe was feeling. She was also asked to give her pain a score, with a score, between one and ten (one being no pain, five being a lot of pain and ten being unbearable pain).

Chloe, was often reluctant to give her pain a score, and would just say that it is okay or bearable. Her comments were used to estimate her pain score. However, it was noted that Chloe's comments did not match her facial

expression, which suggested that she was experiencing a lot more pain than she was reporting. For the first 24-hour period, postoperatively, Chloe's pain was managed by using a patient controlled analgesic (PCA) pump that administered a small amount of morphine intravenously whenever Chloe pressed a button. PCA's have the advantage of being controlled by the patient and they have been found to save nursing time by reducing the need to administer intramuscular injections (Aitken & Kenny 1990; Koh & Thomas 1994, cited in Chumley et al, 2002). However, Chloe was reluctant to use the PCA and complained that it made her feel fuzzy-headed.

Since Chloe had stopped using her PCA the nurse asked Chloe if she would like it to be removed. The nurse also discussed alternative pain management options and it was decide that Chloe should commence regular oral analgesics. Chloe was happier taking oral analgesics and she reported that they controlled her pain much better than the PCA. Helping patients deal with anxiety is important aspect of nursing and postoperative care. Anxiety has been linked to increasing pain levels and fatigue, which adversely affects the patient's quality of life (Carr, 2001) . High levels of stress have also found increased wound healing time (Kiecolt-Glaser JK et al; cited in Gilmartin, 2003) and can depress the body's immune system (Tjemsland et al, 1997, cited in Petry, 2000).

On the third post-operative day, Chloe's nurse had noticed that she had become withdrawn, complaining of fatigue and was becoming anxious. Chloe's anxiety could have come from several sources including concern and worry about her pain, her cancer diagnosis and the success of the treatment, future radiotherapy treatment and how she would cope during her recovery.

To ease her distress, her nurse encouraged her to talk about her feelings and reassured her that her post-operative recovery was on-track and she was doing well. To improve her self-esteem, Chloe was kept informed and was encourage to participate in decisions about her care.

Wound care is also included in the ICP. As a result of the operation, Chloe had a vertical incision in her lower abdomen measuring approximately 25 cm in length. The wound was clean and was held together with dissolvable sutures. The nurse, her doctor and myself frequently inspected Chloe's wound. Close observation of her wound was important as healing is slower in older patients as the skin's ability to repair it's self is reduced with ageing (Desai, 1997). Older patients are also at a higher risk of getting a wound infection (Bailer, 2000).

Chloe's wound was initially covered in a Mepore dressing, a simple covering used to protect the wound from contamination and to absorb mild exudate (Nesbitt & Ballie, 2001). As prescribed by the ICP the dressing was removed on day 2 after Chloe was assisted to have a shower. The wound was cleaned and carefully dried and Chloe was given advice on how to check her wound for signs of infection (erthymia, pain, heat and oedema in and around the wound area (Baxter, 2003). Prevention and treatment of constipation is another important aspect of postoperative care. Constipation is common in surgical patients and can be caused by several factors, including alterations in normal bowel habits, general anesthesia, lack of mobility, dehydration, narcotic and nonsteroidal anti-inflammatory medication use (Fox, 1998). It can cause pain, discomfort, can increase hospital stay and can reduce the patient's quality of life (Ross, 1995; cited in Richmond, 2003).

As soon as Chloe was able to tolerate drinking liquids, she was encouraged to drink as much as possible to prevent dehydration and to promote soft stool formation. Two days after the operation, Chloe was given Lactulose to help promote bowel movement. Lactulose, an osmotic laxative, causes water retention and the formation of bulky stools, which in turn stimulates peristalsis (Butler, 1998; cited in Thompson et al 2003). Chloe was also encouraged to mobilize as much as her pain would allow and was advised to pick high fibre foods from the hospital menu.

By day 3, Chloe’s bowels were open and by day 5 she reported had returned to her normal bowel habits. The transfer of care on discharge is an important aspect of nursing. In response to rising health care costs and advances in medical treatment, the average length of hospital stay has decreased (OECE, 2001 & Nutbeam, 1999; cited in Johnson et al, 2004). This has resulted in a shift in responsibility and cost from health and social care services to the patient and their family (Johnson et al, 2004).

Chloe’s discharge needs were assessed during her preop-clerking visit. She was told that it would take her about six to ten weeks to recover from the surgery. During the recovery period she would have to refrain from cooking, lifting and housework. After discharge Chloe would be responsible for her own health.

She would need to know when to take her medication, how to look after her wound and how to recognise the need to go to her GP. Chloe was concerned about how she would cope as she lived on her own. Because of her financial status, she was not eligible for free home help from social services and

would have to pay most of the cost towards meals on wheels. Chloe's daugher-in-law, Kim, suggested that Chloe should stay with her for during the recovery period. Kim's house had the added benefit of having a downstairs toilet, which would reduce the amount of stairs Chloe had to climb and therefore reduce her fatigue.

The last section of the ICP includs a discharge checklist which is focused around teaching and patient education. Postoperative patient education is a high priority for patients and family members (Fox, 1998). The quality of support from lay carers has been found to improve if they are given information on how to meet the patient's needs after discharge (Porritt, 1979, cited in Webb, 1986). Written information is also an important part of patient education. A review by Johnson et al (2004) concluded that the use of both verbal and written instruction is recommended when educating patients and their carers as it standardises care and appears to improve patient knowledge and satisfaction.

Just prior to discharge, the nurse explained to both Chloe and Kim what to expect during the recovery period, what to avoid and what to look out for (i. e. signs of wound infection). She gave Chloe details of her out patient appointment and gave instructions and information on Chloe's new medications. Chloe was also given a copy of the wards discharge leaflet. The leaflets contained advice in the dos and don'ts following abdominal hysterectomy and provided advice on how she and her family could get further information.

In conclusion, it can be seen that the complications following a hysterectomy can adversely affect the health of a patient. The use of general anaesthesia and opioids could have compromised Chloe's respiratory system. The surgical procedure also put her at risk of shock and infection and resulted in Chloe experiencing pain, anxiety and constipation. The surgery also affected Chloe's capacity to live independently during the recovery period and limited her ability to carry out tasks such as cooking and cleaning. It was clear that Chloe's age was an important factor that increased her risk of post-operative complications.

Following Chloe's progress has shown the importance of identifying and addressing all of the biological, psychological and social factors that affected her health and recovery. These factors are shown to be interrelated and have multiple health effects. For example, if Chloe's need for anxiety management was not met she could have experienced more pain, fatigue and delayed healing. Some of Chloe's needs were common to all patients undergoing the same procedure and these were already identified in the wards ICP.

Her more individual needs were identified through assessment, observation and asking questions such as using the pain score. Careful planning was also an important part of Chloe's successful discharge from hospital care. Chloe's discharge highlighted the importance of family involvement in caring for patient's social care needs.