Cholecystitis; laprascopic cholecystectomy

Introduction

This assignment is based on case study one. Case study one is about a 37 year old woman called Sylvia who had been experiencing abdominal pain, nausea and vomiting. After going to the doctors; a number of tests were carried out. Sylvia was diagnosed to having cholecystitis. Cholecystitis is when the gallbladder wall becomes inflamed and the lining of the abdomen which is near to the gallbladder (University of Varginia Health system, 2008). Sylvia had to go for a laprascopic cholecystectomy because of her cholecystitis. A Laparoscopic cholecystectomy is when the gall bladder is removed keyhole, through " a small incision which is made at the naval and a thin tube carrying the video camera is inserted" (Sieglbaum. 2008). There will be a screen in theatre where the surgeon can look and see what he is doing. The surgeon also inflates the abdomen with carbon dioxide to allow him more space to perform the surgery and so that it easier to view. Another two instruments are inserted into the abdomen so that the gallbladder can be picked up. Another instrument will be inserted at another point on the abdomen " to clip the gallbladder artery bile duct, and to safely dissect and remove gallbladder stones." The gallbladder will then be brought out of the body through the navel incision (Sieglbaum. 2008).

This assignment will focus on the post-operative care of Sylvia. Post-operative care is very important as many complications can occur after surgery and a patient may deteriorate rapidly. An example of a complication which may occur is they may haemorrhage to it is important to monitor the patients observations (Sages, 2004). The model which will be discussed in this report is Roper, Logan and Tierney and the nursing process will be used

to express how to give the best care possible using a person centred approach. Also included in this report will be three nursing actions that are carried out post-operatively. The three nursing skills which will be included in this assignment are Observations, fluid balance and pain.

Planning and Assessing

The nursing process is a continuous process that assesses the patient's needs and looks at the patient holistically. The nursing process goes round a continuum which is Assess, Plan, Implement and Evaluate this is a continuous process. This is important as any patients need's can change frequently. An assessment framework can then be put in place using model such as Roper Logan and Tierney (2003). This specifically looks at meeting the patients' need the nursing staff should have a wider view of how to care for the patient and the patient should be treated as a whole person. The NMC code of conduct (2004) states that you must respect and treat the patient as an individual. This means we have to look at the different areas that make up the patient – their feelings, body and mind this gives us the base of holism (Siviter. 2007, p. 41). The Roper Logan and Tierney model had 12 Activities of daily living the factors which influence these are biological, psychological, sociocultural, and environmental and politicoeconomic. The 12 Activities of living are: Maintaining a safe environment, communication, breathing, eating and drinking, elimination, personal cleansing and dressing, controlling body temperature, mobilising, working and playing, expressing sexuality, sleeping and dying all though each of these activities are separate in there own way they are also linked to each other; for example you can not eat and drink without elimination or breathing (Roper, Logan and Tierney.

2003, p. 13). These activities are important for Sylvia. Sylvia has had surgery so may be facing some problems/potential problems. A care plan has been constructed using the nursing process and 12 activities of daily living to enable nurses to work better as a team and be more away of problems that may occur for Sylvia. In addition to this care will be of a higher quality if the nursing staff are following the same care plan. This care plan is specific to Sylvia and should be reviewed regularly as changes will need to be made as Sylvia will hopefully progress and soon be well enough for discharge home (Appendix 1). The 12 activities of daily living affect every patient as to whether they are meeting them or not. They will affect them at different levels. Sylvia's day to day lifestyle will be affected by her surgical procedure that she has had to remove her gall bladder because of the cholecystitis. The 12 activities of daily living were used to assess Sylvia when she was admitted to set up the care plan. When assessing any one patient we can ask questions or observe them, however asking the patient questions isn't always a reliable as they may not tell you the whole truth or for pain everyone's perception of pain is different. Also when observing someone they may feel conscious of you observing them so will possibly act differently. To provide Sylvia with the best care possible nurses would concentrate more on some activities of daily living than others. These would include: Maintaining a safe environment, communication, breathing, eating and drinking and mobilising.

Maintaining a safe environment

In hospital maintaining a safe environment is key for both the patients and the visitors. It is important that you use the correct equipment for patients to

prevent any hazards or injury for the patient in particular. One which is assessed on admission is the waterlow score this score takes into account many factors too see whether the patient will require a special mattress e. g. air mattress to prevent pressure sores. The waterlow score is one that is often missed along with the must score when the patient is being admitted and often nurses forget to reassess (Waterlow, 2008). When a student nurse was on placement an audit was carried out to see how well the waterlow and must scores were being recorded, the result of this was poor as it had not been getting assessed in the patients notes; it is important to prevent pressure sore and make the patient as comfortable as possible. Wards should be getting 100% as it is important to give the best care possible to every patient to do this they need to be assessed regularly; this is a prime example of were the nursing process should be used. Sylvia may be at risk of falling out of bed due to anaesthetic so nurses should put the cot sides up on the bed. If Sylvia's surgery had gone to open surgery when she returned to the ward she should be in a side room to prevent her wound from being at risk of getting infected or contracting MRSA.

Communication

Communication between staff and patients is extremely important, so that the patient knows what the plan is and can start to build trust in the staff. The more trust the patient has in the staff the more likely they are to ask questions and feel less embarrassed. " Humans are essential social beings and spend the major part of each day communicating with other people. The activity of communication is therefore an integral part of all human relationships and all human behaviour" (Roper, Logan and Tierney. 2003, p.

19). This shows that communication is the most important activity of living as without communication it would be impossible to give or receive information. When Sylvia is first out of theatre she will be unable to communicate fully due to the anaesthetic, so it is important to closely monitor her to make sure that there is no problems occurring. When Sylvia arrived back on the ward, the staff that was with her in the recovery room would handover how the operation and her recovery had gone so far. Communication can be both verbal and non-verbal. For example Sylvia had a sore abdomen after the operation she may have had her hand over it and her facial expression may have been expressing pain. When Sylvia was getting ready to be discharged home, when she got up she went pail and was feeling faint and was advised to stay in overnight. The nurses would have to get in contact with someone such as social work to arrange care for Sylvia's children. " Good communication among professionals in the post operative period is essential" (Gibson 2006 p 936). It is useful if the nurse has back ground knowledge on the procedure as the patient may not understand some of the doctor's terms.

Breathing

Breathing is fundamental to every human being. " Breathing seems effortless and people are not usually consciously aware of the AL of breathing until some abnormal circumstances forces it to their attention" (Roper, Logan and Tierney. 2003, p. 22). Sylvia was being assisted to breathe with the aid of oxygen therapy after her operation. The organs of the respiratory system provide cells of the body with oxygen through the external and internal respiration process. To allow this to work, " the blood,

together with the vessels and organs compromising the circulatory and lymphatic systems, is also required.” We need both the “ respiratory system and the cardiovascular system” to allow us to breathe (Roper, Logan and Tierney. 2003, p. 22). Nurses can encourage Sylvia to deep breath which will expand the lungs and clear the anaesthetic.

Eating and Drinking

“ Eating and drinking play a significant part in the everyday living pattern of all age groups, and for most people they are pleasurable activities” (BUPA, 2009). If an individual in unable to eat for reasons beyond their control they may be given a nasal gastic tube and fed through this and given IV fluids. Eating and drinking is essential to stay alive, without food and drink you would die. Eating and drinking also helps in the healing process. Protein and vitamins which we get in some food will help wounds to heal more quickly and also glucose for energy. It is also important to keep hydrated so that the wound heals quicker (BUPA, 2009). So this is vital after an operation when able that Sylvia eats to help heal her wound areas that she will have. If Sylvia does not eat and drink the wound will take longer to heal and will increase the risk of infection.

Mobilising

“ The capacity for movement is a characteristic of all living things and the ability to move the body freely is a necessary and much valued human activity” (Roper, Logan and Tierney. 2003, p. 38). Sylvia’s mobility may be limited due to the cholecystectomy and anaesthetic; because Sylvia’s operation was laparoscopic her wound will heal quicker so she will regain full mobility quicker. If Sylvia needs the toilet quite soon after the operation she

may need assistance as she will still be under anaesthetic. This may be embarrassing for her so it is important to maintain privacy and dignity. When Sylvia returns hope caring for her children may prove quite difficult as she will not be able to lift them. She will require some assistance with this from family or friends. If there is no one who can help her, the nurses can get in contact with the social work to see if she can get help with her children while recovering. Sylvia needs to take care when caring for her children because of her wound.

Nursing Actions

Nurses have to carry actions out to make sure that everything is going in the right direction for Sylvia and if there are any problems they can deal with them quickly.

Observations

When Sylvia arrives back to the ward from surgery it is very important that a nurse checks ABC (Airways, Breathing, Circulation) immediately and continues to monitor this. If Sylvia is alert and conscious this is a good sing that she has an airway and that she is breathing, if Sylvia is warm and good colour e. g. not blue or grey and her heart rate is within the average rate her circulation is good. The nurse may also press on the finger nail to see how quick it goes from being white to red this is to see how good the capillary refill is. If it is good it should change from white to red within 2 seconds. If it had taken longer than two seconds to change back this may be due to dehydration, shock peripheral vascular disease or hypothermia (Dugdale, 2009). When Sylvia arrived back on the ward all the nurses would be given a handover to say how the surgery had went and if everything had gone as

planned. On Sylvia coming back to the ward her observations must be checked. Sylvia will be on a SIRS chart since she has been to theatre. The observations on this are (Blood pressure, temperature, respiratory rate, Spo2 level, heart rate, urine output pain score and PCA (patient controlled analgesia). The normal/average ranges for each of these observations are:

* Blood pressure – “ 100/60 – 140/90” (Marieb and Hoehn 2007, cited in Dougherty and Lister 2008, p. 622)

* Temperature – “ 36-37. 5oC” (Tortora and Derrickson 2008, cited in Dougherty and Lister 2008, p. 656)

* Respiratory rate – “ 15-20” (Weber and Kelley 2003, cited in Dougherty and Lister 2008, p. 613)

* Spo2 level – “ 95%-98%” (Woodrow 1999, cited in Dougherty and Loster 2008. P. 648)

* Heart rate – “ 55-90” beats per minute (Weber and Kelley 2003, cited in Dougherty and Lister 2008, p. 613)

* Urine output – “> 1803 ml/6hr” (Gibson, 2006 pg922)

Sylvia’s observations will be checked regularly: “ every 15 minutes for the first hours, every hour for the next 4 hours and every 4hours for the next 48 hours” (Lippincott Williams & Wilkins, 2007 pg 379). The every 15 minutes checks will be done in the recovery room rather than it the ward. Looking at Sylvia’s observations on returning to the ward her blood pressure was slightly high – 145/90, respiration rate was also high at 23 per minute as was

heart rate at 100 beats per minute, because of Sylvia's high heart rate and high respirations we have to monitor her closely because if her blood presser was to be low that would be a sign haemorrhage. Sylvia had a high pain score of 7/10 this score is based on 0 being no pain and 10 being unbearable. Sylvia was given Morphine to try and relieve the pain that she had. It is important to ask Sylvia about nausea as many patients do feel nauseous after surgery this may be because the surgery is in the abdomen area or because of the drugs used for the general anaesthetic this includes anaesthetic gases.(Selby, 2006). Sylvia was prescribed Ondansetron for nausea.

Fluid Balance

Before Sylvia went for surgery she would of have to have fasted. Post-operatively Sylvia would be on a fluid balance chart. SIGN 2004 states that " the principles of fluid balance" after a patient has had an operation are:

* " to correct any pre-existing deficiency

* To supply basal needs

* To replace unusual loses...

* To use the oral route where possible; there is often an unnecessary delay in commencing oral intake after surgery" (SIGN, 2004 pg 28).

Sylvia may be dehydrated due to having been fasted. She may have IV fluids running which would have been prescribed by the doctor and put up and checked by the nursing staff. About 52% of a female's body weight is fluid in the body. A loss of fluids can case major effects. If there is as little as 10%

loss it can cause death, 8% illness and 5% thirst (Carroll, 2000). This shows how important it is to monitor Sylvia's intake (IV fluids, oral fluids when able) and out take. (Urine, Fluid from drain site, feces, vomit and sweating but this would be impossible to measure). This should be recorded hourly. Unusual loses such as fluid from the drain sight needs to be replaced. This may be done with IV fluids. When Sylvia returned to the ward she had not passed urine, if this continued she would have to be catheterised but fortunately she passed urine at 6pm. The stress of the surgery may have caused strain on the kidneys and could be the cause of the delay in excretion of urine. This would have been measured and recorded on the fluid balance chart. Sylvia would possibly have a drain from her wound so it is also important to record the volume of fluid that is coming from the wound. There was no sign of soakage from the wound site when she returned to the ward which is a positive sign. This should be continuously monitored. At the end of each night everything that Sylvia has taken in has to be added up and her total out put needs to be taken away from this to see if she has a positive or negative fluid balance.

Pain Assessment and how to control pain

Patients are often very concerned about what their pain level will be after surgery (Gibson, 2006 pg 929). Many patients often expect to feel pain postoperatively and are show that they are satisfied even if the pain is still present. (Sherwood et al 2003, Cited in Gibson, 2006 pg 929)

There are many pain assessments that can be used. Every patient is an individual and perceives pain differently. What is a pain score of 5 may be a pain score of 8 to someone else. When Sylvia returned to the ward the

nurses used the pain assessment of asking her what her pain was on a scale of 0-10 with 0 being no pain and 10 being unbearable. Sylvia's pain score was 7/10. This is quite a high pain score. The doctor reviewed Sylvia and prescribed 2. 5mg of Morphine to be given by subcutaneous injection. According to the BNF (2007) the dosage Sylvia was prescribed is adequate to start with as the maximum dosage is " 10mg every 2-4 hours if necessary" (BNF, 2007 pg 228). Morphine is a controlled drug so has to go through the controlled drug book and has to be checked by two registered nursing staff. If Sylvia's pain was to continue the doctor may decide to give her a PCA to control the pain. A PCA is Patient controlled analgesia and is given through the rout of IV. Sylvia would have a button that she would be able to pres when she felt she required something for the pain. The patient is unable to overdose on this as the machine has a lock on it and will only allow the patient to press the button for example once every five minutes. The amount of medication the patient has used from the pca is recorded on the observation chart. On the machine it will also tell us how many good attempts Sylvia has had and how many bad. If there is a lot of bad this means that her pain must be bad and she is pressing the button more often than she is allowed. The doctor would have to review this (Macintyre, 2001).

Conclusion

To conclude this assignment it is important to work as part of a team and communicate with the multidisciplinary team to give Sylvia the best care possible. It is important to treat the patient holistically. In addition to this, this assignment shows how the nursing process works and how it can be used along with Roper, Logan and Tierney's 12 activities of daily living. It

shows how well the use of the activities of living fit in with the nursing process in making a care plan.

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