

A laparoscopic cholecystectomy was indicated nursing essay



**ASSIGN
BUSTER**

Cholecystitis is defined as an inflammation of the gallbladder caused most commonly by the obstruction of the cystic duct Bloom et al., 2012. The gallbladder is a small organ located under the liver that plays a major role in the digestion of fat (Balentine, 2012). Normally bile and digestive enzymes pass out of the gallbladder on their way to the small intestine. If this flow becomes blocked, it will build up inside the gallbladder, causing swelling, upper abdominal pain, and gallstones resulting in liver dysfunction (Bloom et al, 2012; Mackillop & Williamson, 2010).

Gallstones are solid particles that are formed from bile (Balentine, 2012). Common risk factors in the formation of gallstones include being female of childbearing age, overweight, certain medications such as birth control pills or statins, rapid weight loss, poor dietary habits and pregnancy (Ali, Cahill, & Watson, 2004; Balentine, 2012; Mackillop & Williamson, 2010). Gallstones can block the outflow of bile and digestive enzymes from the pancreas. If this blockage persists, the gallbladder can become inflamed causing cholecystitis (Balentine, 2012).

The initial treatment of cholecystitis includes bowel rest, intravenous hydration, analgesia and antibiotics (Bloom et al., 2012). Outpatient management may be suitable however if surgical treatment is indicated, laparoscopic cholecystectomy represents the gold standard of care (Bignell et al., 2011; Chowbey et al., 2010; Farkas et al, 2012; Tsimoyiannis et al., 2009). In the diagnostic process for surgical interventions an ultrasound scan may be performed however magnetic resonance cholangio-pancreatography (MRCP) is the diagnostic preference for gallstones (Mackillop & Williamson, 2010). MRCP is a non-invasive technique used for viewing the bile and

<https://assignbuster.com/a-laparoscopic-cholecystectomy-was-indicated-nursing-essay/>

pancreatic ducts and gallbladder using magnetic resonance imaging (MRI) (Mackillop & Williamson, 2010).

Laparoscopic cholecystectomy requires gas to be administered into the peritoneal cavity and thus routinely requires general anaesthesia with intubation (Sherwinter, 2011). The advantage of laparoscopic cholecystectomy results from preserving the integrity of the abdominal wall which reduces operative trauma and complications. It also has been shown to have a greater recovery time decreases postoperative pain and the need for postoperative analgesia, shortens hospital stay and returns the patient to full activity within 1 week (Sherwinter, 2011; Tsimoyiannis et al., 2009).

For the operation anaesthesia was induced with fentanyl, midazolam, propofol and rocuronium. Tracheal intubation was facilitated with suxamethonium. Anaesthesia was maintained with a propofol infusion accompanied with a nitrous oxide and oxygen ventilation. Mrs Smith was also given 4mg of ondansetron before the end of surgery for the prevention of post-operative nausea and vomiting and was administered bupivacaine into all trocar wound sites. At the conclusion of the surgery Mrs Smith was administered glycopyrrolate and neostigmine to antagonize the residual neuromuscular blockage and pain relief was given via fentanyl pain protocol.

After induction of anaesthesia Mrs Smith was positioned in the reverse Trendelenberg with the right side of the table elevated. Abdominal insufflation was achieved with CO₂ and intra-abdominal pressure was maintained at approximately 13 mm Hg (Gupta et al., 2007; Shora et al., 2008; Tsimoyiannis et al., 2009). Intra operative monitoring included

electroencephalogram (EEG), pulse oximetry, blood pressure and heart rate via arterial line, and temperature (MacKay, Sleight, Voss & Barnard, 2010; Shora et al., 2008)

One clinical issue related to Mrs Smith's perioperative care is strategies to avoid wrong-site surgery. Safe surgery is a world-wide recognised issue (WHO, 2009). Healthcare and surgical care provision encompass such a degree of variation and complexity that it involves an increased risk of errors (Weiser et al., 2010). These increased risks are due to multifaceted issues of human error where there is a breakdown in communication or processes (Brady, 2009).

The WHO Surgical Safety Checklist is designed to enhance both communication and teamwork and to safeguard that healthcare professionals deliver evidence based patient care (Anderson 2009). The surgical safety checklist identifies three phases of an operation; the 'sign in' 'time out' and 'sign out'. Each point corresponds to a specific period in the normal flow of work. A checklist coordinator, usually the circulating nurse, ensures that the surgical team has completed the listed tasks before continuing onto the next phase (WHO, 2008)

The 'sign in' period is before the induction of anaesthesia (WHO, 2008). This is where the patient confirms to operating room staff, their identity, type and site of operation (in their own words), and confirms their approval for the procedure by acknowledging their signature on the consent form. The anaesthesia safety check is also completed within this phase. This check asks questions relating to allergies, make-up or nail polish, dentures or

prosthesis, time bladder last emptied and the time that the last food and fluid were consumed. It likewise checks identification band, and whether the operative site has been marked by doctor (Queensland Health, 2011). The 'sign in' phase allows for the checklist to not merely be a 'to do' list. It ensures that important safety identifiers have been checked and collated correctly (Karl, 2009). It permits a logical and systematic approach aligning with the organizations values, highlighting patient safety and recognising individual roles in ensuring patient safety within the multidisciplinary partnership. This phase also emphasises an institutions regulatory requirements that essentially improves patient care (Conley et al, 2011).

The second phase is the 'time out'. This occurs before skin incision (WHO, 2008). Operating staff actively confirm differing team member's roles. The surgeon, anaesthesia professional and nurse verbally confirm the patient, type and site of the operation to be performed and visually check for a valid consent. For the nursing team it is also a time to review sterility and equipment (WHO, 2008). Brady (2009) reports that wrong site surgery is the second highest among all sentinel events recorded. He attributes faulty communication and organizational culture as factors contributing to sentinel events and endorses strategies such as surgical safety checklists, that increase the effectiveness of team functioning.

The third phase of 'sign out' is initiated before the patient leaves the operating room (WHO, 2008). The checklist coordinator confirms with the team the name of the procedure recorded, that the surgical count is correct, the specimen is labelled accurately and if there were any equipment problems needing to be addressed (WHO, 2008). This period again

<https://assignbuster.com/a-laparoscopic-cholecystectomy-was-indicated-nursing-essay/>

emphasises improved communication among surgical team members and thus quality of care (WHO, 2012). According to Kao and Thomas (2008, as cited in Jones, 2011) surgical errors such as wrong site surgery can be attributed to individuals as opposed to one individual. By this constant communication and clarification at certain time periods throughout an operation demonstrates improved communication where potential risks where minimised (Jones, 2011).

Jones (2011) also claims that with the WHO checklist, interaction between team members have improved and potential risks minimised. Surgical safety checklists not only improve communication and teamwork, but also improve understanding of each other's roles (Bell, 2010). This strategy can achieve massive reductions in complications and studies indicate that a checklist works because it is more than just a tick sheet. With the effective adoption it generally requires local system changes and a commitment to teamwork for safety (WHO, 2012).

Checklists are acknowledged as an organised system for a safe ending to a task. Research has suggested that at least half of all surgical errors are avoidable (Weiser et al (2010). If used properly the WHO Surgical Safety Checklist, through effective teamwork and communication will result in the right patient, having the right procedure, at the right time in the right area (Donaldson 2008).

Sherwinter, D. A. (2011). Laparoscopic Cholecystectomy. Retrieved from <http://emedicine.medscape.com/article/1582292-overview>

<https://assignbuster.com/a-laparoscopic-cholecystectomy-was-indicated-nursing-essay/>

Queensland Health (2011). Perioperative Patient Record. Retrieved from <http://www.health.qld.gov.au/psq/pathways/docs/pre-op-check-a3-11.pdf>