2016

Postoperative Ileus

Jamie Pearson
jamie.pearson@otterbein.edu

Follow this and additional works at: https://digitalcommons.otterbein.edu/stu_msn

Part of the Nursing Commons

Recommended Citation
Pearson, Jamie, "Postoperative Ileus" (2016). Master of Science in Nursing (MSN) Student Scholarship. 189.
https://digitalcommons.otterbein.edu/stu_msn/189

This Project is brought to you for free and open access by the Student Research & Creative Work at Digital Commons @ Otterbein. It has been accepted for inclusion in Master of Science in Nursing (MSN) Student Scholarship by an authorized administrator of Digital Commons @ Otterbein. For more information, please contact shickey@otterbein.edu.
Introduction
The topic of postoperative ileus is one that I became very interested in while caring for patients with this particular complication and onset ileus. This author is a registered nurse on an orthopedic unit in a local hospital, and unfortunately postoperative complications are a subject that many nurses experience. Patients with postoperative ileus includes symptoms such as nausea, vomiting, and pain, and the intervention of a naso-gastric tube set to suction to decompress the stomach.

This author’s sign is this poster to share research on postoperative ileus to help others learn more about the pathophysiology of the condition, causes, symptoms, treatments, and prevention. By learning more about postoperative ileus, healthcare professionals will be better prepared to care for patients suffering from this condition.”

Ileus

Postoperative ileus is an impairment of bowel function that occurs after surgery. Ileus is a functional obstruction of the bowel, rather than a mechanical obstruction (Thompson & Magnuson, 2012). Postoperative ileus can affect the small or large intestine (Fineberg et al., 2014).

Signs and Symptoms

• Discomfort relative to the fluids in the gastrointestinal tract
• Abdominal distention of bowel contents
• Lack of passing flatus
• Lack of passing stool
• Nausea
• Vomiting
• Delayed absorption of nutrients and medication (Lafon & Lawson, 2012)
• Electrolyte disturbances

Underlying Pathophysiology and Its Significance

The exact etiology and pathology of a postoperative ileus is not known (Wronska, 2014). Development of a postoperative ileus is influenced by:

• Autonomic nervous system
• Enteric nervous system
• Neuropeptides
• Nociceptors
• Anesthesia

Anesthesia inhibits bowel motility with the large intestine affected most often. Upper gastrointestinal region can also experience decreased gastric emptying leading to delayed onset of bowel sounds and nausea. These areas are affected because of the neural impact to the neural integration (Lair, 2011). Nursing care provides bowel mobility by binding to peripheral opiate receptors causing impairment (Lair, 2012). Narcotics also decrease the urge to have a bowel movement (Lair, 2011). Activity level: Patients bed rest has an increased risk of developing an Ileus (Hiranyakas, Bashankaev, Seo, Khaikin, & Thompson, 2013). Type of surgery: Abdominal surgery causes inflammation which increases the chance of an ileus (Thompson & Magnuson, 2012).

There are many neural pathways in the gastrointestinal tract that are responsible for peristalsis. The three major neural controlling the activity of the gastrointestinal tract include sensory neurons, interneurons, and inhibitory and excitatory motor neurons (Thompson & Magnuson, 2012).

Abdominal x-rays may show dilated air filled loops, however this finding is not exclusive to an ileus (Ward, 2012).

Ileus usually resolves in three to five days. However, the average length of hospital stay increases the patient’s risk of other postoperative complications, including pulmonary complications and infectious complications (Lafon & Lawson, 2012).

Implications for Nursing Care

Nurses are vital in providing a positive patient experience for patients by providing the greatest benefit possible. Postoperative ileus can affect the small or large intestine (Fineberg et al., 2014). Due to all of these factors on ileus, nursing care must be used to do holistic benefit to resolve an ileus once it occurs because of the multifactorial nature of the condition (Hiranyakas et al., 2011).

Prevention methods of postoperative ileus include:

• Suction oral fluids
• Adequate fluid intake
• Early ambulation (Lair, 2014)
• Avoid excess doses of narcotics Non- opioid medications such as NSAIDS and local anesthetics can be beneficial for pain control without aggravating the condition (Lair, 2011).
• Chew gum: Studies have proved evidence that patients that chewed gum following surgery were able to pass flatus and have a bowel movement sooner than the non-chewing groups. The gum-chewing patients had less incidence of postoperative ileus and a shorter length of stay in the hospital. Less incidence of postoperative ileus led to better patient satisfaction among the gum-chewing patients. This intervention is also referred to as sham feeding. Gum chewing mimics intake of food which activates the enteric and mesenteric nerves. Gastric acid, pepsin, and pancreatic polypeptide are then produced and secreted which increases gastric motility (Wronska, 2014). Some brands of sugar-free gum contain Xylitol which can even have a mild laxative effect on the patient (Forrester, Doyie, Munoz, McTigue, D’Andrea, & Natale-Ryan, 2014).

Postoperative ileus can affect the small or large intestine (Thompson & Magnuson, 2012). Ileus can lead to increased:

• Risk of morbidity
• Length of hospital stay within 30 days of discharge from a hospital (Bragg, EII, Sharkey, Paulis, Mannell-Armstrong, & Lobus, 2015)
• Healthcare costs—estimated at $1 billion annually in the United States (Lafon & Lawson, 2012)

Medication, surgical techniques, and postoperative nursing care are all important elements of a patient’s care to aid in a return of normal gastrointestinal function following surgery or a postoperative ileus. There is currently no method approved by the U.S. Food and Drug Administration to prevent a postoperative ileus (Lafon & Lawson, 2012). Furthermore, there is not one single medication to resolve an ileus once it occurs because of the multifactorial nature of the condition (Hiranyakas et al., 2011).

References

Munoz, A. (2012). Return of bowel sounds indicating an end of postoperative ileus: is it time to cease this long standing nursing tradition? MEDSURG Nursing, 21(4), 146-150. doi:10.1097/01.NURSE.0000451535.63211.a8

Conclusion

Postoperative ileus cannot be completely eliminated. However, there are many interventions that can help to reduce a patient’s risk of postoperative ileus. Patients will benefit from understanding preventative strategies to help prevent themselves from complications and to prepare for the postoperative recovery period. Improved patient understanding of the surgery and recovery will help to prevent complications and help to improve patient outcomes (Hadden, Prince, Schraeder, Couch, Stephenson, & Weyts, 2016).