Introduction

Postoperative ileus (POI) is defined as functional inhibition of propulsive bowel activity, irrespective of the pathogenic mechanism. Postoperative dynamic ileus or paralytic ileus is defined as ileus of the gut persisting for more than 3 days following surgery ***(Livingston and Passaro, 1990).***

Ileus occurs from hypomotility of gastrointestinal tract in the absence of mechanism of bowel obstruction. This suggests that the muscles of the bowel wall is transiently impaired and fails to transport intestinal contents. This lack of coordinate propulsive action leads to accumulation of both gas and fluid within the bowel ***(Kehlet and Holte, 2001).***

The exact etiology of ileus is unknown, but it is believed to be more common after laparotomy and procedures that enter the peritoneal cavity. Many factors are believed to contribute to POI including intraoperative bowel manipulation, anesthetic agents, perioperative narcotics and postoperative sympathetic over activity ***(Livingston and Passaro, 1990).***

The pathophysiology of POI is becoming clear and multifactorial. Suggested causes of POI include stimulation of sympathetic reflexes, inhibitory humoral agents, nor-epinephrine release from the bowel wall, and effect of anesthetic agents ***(Kalff et al., 1998).*** These factors comprise the stress response to surgery ***(Holte and Kehlet, 2002).***

Common symptoms associated with POI include abdominal distension or bloating, pain, nausea and vomiting, inability to pass stool, and inability to tolerate solid diet. A delay in resuming a normal diet may result in catabolism, which may lead to hypoalbuminemia and poor healing. Since POI

affects patient motility there is greater risk for pulmonary complications. In total these complication lead to increased length of hospital stay and higher health care costs ***(Darvall et al., 2011).***

Clinically, on auscultation of the abdomen bowel sounds are not heard in paralytic ileus, instead high pitched tinkling sounds are present and are due to passive movement of fluid from one dilated intestinal loop to another ***(Dobrovolski et al., 2004).***

The typical preventive or treatment modalities for POI have been unchanged and few in numbers for many years include nasogastric intubation (NGI), mobilization, administration of laxatives, fluid administration, improved surgical techniques, and prokinetic agents. NGI is used to decompress the stomach. It has traditionally been employed as a supportive measure for POI, but there is no sufficient data to substantiate its benefit. Furthermore, NGI actually delays feeding of the patient. Mobilization has been thought to increase bowel motility. However, there have been no well controlled studies to demonstrate any beneficial effect of ambulation on POI. While laxatives have been widely used post surgically, their effectiveness has not been well investigated and there are no randomized studies to show benefit of postoperatively administrated laxatives on bowel motility or POI. Excess fluid administration may lead to bowel oedema resulting in prolonged POI ***(Kehlet and Holte, 2001).***

Studies have suggested that early feeding is safe and leads to decreased duration of POI and earlier hospital discharge ***(Han-Geurts et al., 2007).*** In addition, Gum chewing as a form of feeding enhances early recovery from postoperative ileus after laparoscopic colectomy ***(Asao et al., 2002).*** So that Gum chewing may be an effective immediate measure and inexpensive easy method of stimulating motility.