

Ileostomy in the Setting of Diverticulitis: A Case Study

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Introduction

A case study reviewing the nutritional implications, medical nutrition therapies, and treatment of diverticular disease in the setting of new ileostomy. Diverticulitis is the inflammation and/or infection of diverticula found in the colon. If the diverticula perforate or tear, an ileostomy can be a surgical treatment. In this case, the sigmoid colon is impacted by diverticulitis and surgically removed. The ileostomy's purpose is to excrete waste without irritating the newly resected colon.

Case Study Description

A 41-year-old, Caucasian female presents with intermittent right lower quadrant pain and nausea for three months with elevated white blood cells and electrolytes within normal limits. She is English speaking with no documented or reported family history. She has a surgical history of cholecystectomy.

Medical Diagnosis

Acute sigmoid diverticulitis with a sealed off perforation and abscess measuring 5.3 by 8 centimeters abutting the bladder.

Nutrition Diagnosis⁴ - "Altered gastrointestinal function related to diverticulitis status post low anterior resection with post operation ileus as evidenced by ileostomy and NPO and clear liquid diet status for 5 consecutive days."

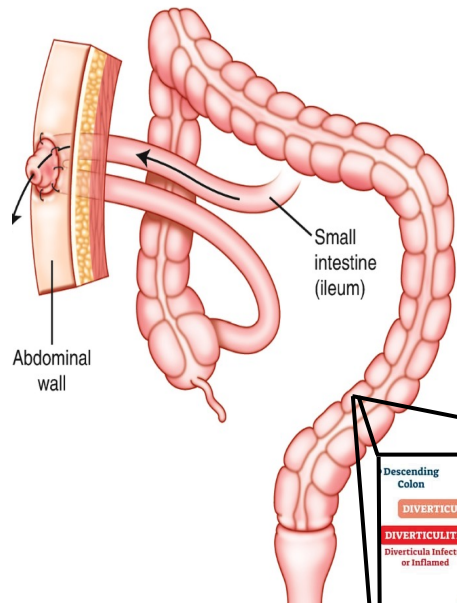
Interventions:

- Advance diet as able to goal of fiber restricted diet
- Educate the patient on nutrition therapy for ileostomy
- Recommend protein supplements (Gelatin 20 and Ensure Max)
- Monitor electrolytes and replete as needed
- Consider PPN if diet not advanced by LOS⁷

Estimated Energy Needs³:

Calories: 1,648-1,977 Kcal
(25-30 kcal/kg)
Protein: 79-99 g/protein
(1.2-1.5 g pro/kg)
Fluid: 1648 mL+
(25+ mL/kg)

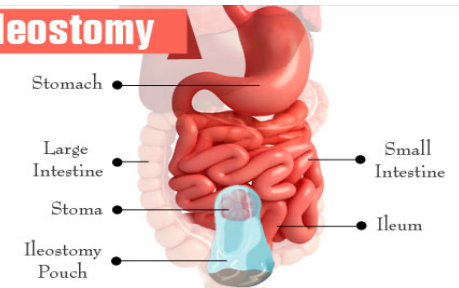
Diverting Loop Ileostomy¹



Education²:

- Signs of dehydration – Decreased urine output, dizziness, lightheaded
- Diet progression – Clear liquid->Full liquid->Fiber restricted
- Troubleshooting different ostomy outputs – Blockages, odor, gas, loose stool
- Vitamin and mineral supplementation – chewable multivitamin and calcium citrate

Ileostomy



Discussion and Conclusion: This case study illustrates the importance of diet and nutrition-focused therapies as a means of treatment and recovery from diverticulitis. Ileostomy creation in the setting of diverticulitis increases risk of dehydration, vitamin and mineral deficiency, and complications such as output blockages and odor. When medical nutrition therapy is provided, along with medical and surgical treatments, the patient's prognosis improves. Given the patient's nutritional status at discharge, she is expected to make a full recovery before her return to the hospital for ileostomy reversal.

References:

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- 3 Johns Hopkins Bayview Medical Center. (n.d.). *Standards of Practice*. Baltimore, MD; Johns Hopkins Medicine.
- 4 Johns Hopkins Bayview Medical Center. (n.d.). *Standards of Care*. Baltimore, MD; Johns Hopkins Medicine.

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