Palliative Management of Advanced Peritoneal Carcinomatosis

Laura A. Lambert, MD[a,*], Ryan J. Hendrix, MD[b]

KEYWORDS

• Carcinomatosis • Palliative • Ascites • Obstruction • Hospice

KEY POINTS

- Peritoneal carcinomatosis is one of the most challenging oncologic conditions for providers, patients, and families.
- Optimal care of patients with peritoneal carcinomatosis requires knowledge of the natural history of the disease and a multidisciplinary team approach to care.
- Early referral to palliative care is appropriate for any patient with peritoneal carcinomatosis.

INTRODUCTION

From both a therapeutic and palliative perspective, peritoneal carcinomatosis (PC) represents one of the greatest challenges in oncology. Given the advances in surgical techniques, regional therapies, and medications over the past decade, health care providers and patients now have therapeutic modalities to pursue with the hope and intention for cure. However, despite significant advances in the management and treatment of PC, morbidity rates remain high and survival rates remain low. Many patients experience a complex and protracted course after diagnosis plagued by complications such as abdominal pain, mechanical bowel obstruction, symptomatic dysmotility, symptomatic ascites, biliary or ureteral obstruction with end-organ failure, anorexia, tumor cachexia, and fatigue as well as a variety of enteric fistulae. Consequently, knowledge of and experience with managing the clinical manifestations of PC are essential for the optimal delivery of care to this patient population. Furthermore, early referral to a comprehensive palliative care team for supportive management and assistance with goals of care can be extremely helpful

Disclosures: The authors have nothing to disclose.
[a] Surgical Oncology, Huntsman Cancer Institute, 2000 Circle of Hope Drive, Salt Lake City, UT 84112, USA; [b] Division of Surgical Oncology, Department of Surgery, University of Massachusetts Medical School, 55 Lake Avenue N., Worcester, MA 01608, USA
* Corresponding author.
E-mail address: laura.lambert@hci.utah.edu

Surg Oncol Clin N Am 27 (2018) 585–602
https://doi.org/10.1016/j.soc.2018.02.008
surgonc.theclinics.com

in optimizing the care of these complex clinical, emotional, spiritual, social, and existential situations.

This article reviews the multidisciplinary, multimodal options available for the management of PC from a palliative perspective.

PALLIATIVE MANAGEMENT OF BOWEL OBSTRUCTION AND GASTROINTESTINAL DYSMOTILITY FROM PERITONEAL CARCINOMATOSIS

Bowel obstruction is a challenging, ominous, and all too frequent complication of PC. Possibly arising at any point along the gastrointestinal tract, the etiology of a bowel obstruction can be quite diverse and response to nonoperative measures difficult to predict. Regardless, initial management should include appropriate intravenous fluid resuscitation based on the degree of dehydration and correction of any metabolic abnormalities. The patient should be made nil per os to minimize gastrointestinal stimulation and secretions with the placement of a nasogastric tube for gastric decompression if the patient is vomiting. Serial abdominal examinations to monitor for signs or symptoms of peritonitis are essential. Imaging studies such as an abdominal series and/or a computed tomography (CT) scan of the abdomen and pelvis are helpful to determine the level and nature of the obstruction, and also offer insight regarding complications such as ischemic bowel, perforation, or the presence of ascites.

Patients who are hemodynamically stable, without signs of peritonitis, and who have a normal or only mildly elevated white blood cell count (especially in the setting of dehydration), can initially be monitored closely for resolution of their obstruction and return of bowel function This attempt at a nonoperative approach often yields success, but may require a prolonged period of enteric rest. Because patients with PC are often malnourished before an obstruction, health care providers should consider parenteral nutrition while planning additional palliative measures. The clinician can assess the severity of malnutrition and associated indications with assistance from the American Society for Parenteral and Enteral Nutrition guidelines, which recommend screening for insufficient energy intake, weight loss, loss of muscle mass, loss of subcutaneous fat, localized or generalized fluid accumulation, and diminished functional status as measured by handgrip strength.[1]

The development of signs and symptoms of peritonitis or a CT scan suggesting a "closed loop" obstruction (obstruction caused by a loop of intestine twisting around its mesentery) are indications for an urgent surgical intervention (**Fig. 1**). The exact nature of that intervention is ultimately determined at the time of surgery and may involve a simple lysis of adhesions, or segmental bowel resection for a closed loop obstruction, or for a nonclosed loop obstruction, a diverting loop ostomy or end-ostomy (either small or large bowel depending on the location of the obstruction). In more advanced cases, the placement of a decompressive gastrostomy tube for venting the stomach if the obstruction cannot otherwise be relieved may be warranted. From a technical standpoint, these operations are challenging, and pose a high risk for perioperative morbidity and mortality.[2–5] Thus, careful patient selection for a surgical intervention for a malignant bowel obstruction from PC is essential. In an effort to improve outcomes for these patients, the cooperative group, Southwestern Oncology Group (SWOG), is currently conducting a multicenter, prospective clinical trial (SWOG S1316) comparing operative and nonoperative management of malignant bowel obstruction.[6]

For obstructions located in the duodenum, rectum, or at the rectosigmoid junction, it may be reasonable to consider an endoscopic stent placement before, or instead of, surgery. Although the presence of PC has been shown to increase the risk of failure of endoscopic stent placement for colonic obstruction, there is still a reported 77% to