



Comprehensive Research Experience for Medical Students
Summer Research Program 2019

Supervisor/Project Information Form

Due February 20 2019 by email to crems.programs@utoronto.ca

Supervisor Name: Lilian Gien, MD, MSc, FRCSC

Project Title: Management of Malignant Bowel Obstruction in Patients with Advanced Gynecologic Malignancies.

Hospital/Research Institution: Sunnybrook Health Sciences Centre

Email: lilian.gien@sunnybrook.ca

Field of Research (2 keywords): gynecologic cancer, bowel obstruction

Department: Obstetrics & Gynecology

School of Graduate Studies Appointment (IMS, LMP, IHPME etc)? Yes/No: YES If YES, please name: IHPME

Brief Project Description (< 300 words):

Background

Malignant bowel obstruction (MBO) is a common complication in women with gynecologic (gyne) cancers, which imposes a significant burden on patients, caregivers, and healthcare systems. Contemporary MBO symptom management in the advanced setting often necessitates extended hospitalization, which results in a broad therapeutic approach that involves palliative surgery, chemotherapy, and pharmacological symptom management. Despite these interventions, the majority of these women will experience recurrent episodes of MBO over time, which significantly impacts quality of life (QoL). Paradoxically, although a frequent complication, there are no standardized guidelines on MBO treatment approaches. As such, optimal and efficient management of MBO remains an unmet clinical need and presents a barrier to ensuring *i)* the safety of patients; *ii)* the provision of effective cancer care based on best evidence; and *iii)* the delivery of integrated care across the cancer care continuum. Currently, the incidence and management of malignant bowel obstruction at our institution is unknown and not well described.

Objectives

- 1) Determine the frequency of admission and length of stay for gynecologic cancer patients with malignant bowel obstruction.
- 2) To describe the characteristics of patients admitted with MBO.
- 3) To describe the treatment of patients with MBO (surgical, medical, interventional radiology), and their treatment outcomes.
- 4) To determine which factors are most likely associated with shorter length of stay for patients with MBO.

Methodology

In this retrospective study, all consecutive patients who presented with bowel obstruction (ICD-9 code: K56 or K91.3) at Sunnybrook will be identified between 2015-2018. Patients will be included with the following criteria: *i*) clinical evidence of bowel obstruction (history/physical/radiological examination); *ii*) bowel obstruction due to malignancy deposits beyond the ligament of Treitz; and *iii*) diagnosis of advanced gynecological cancer. Patients who presented with MBO at the time of initial diagnosis of ovarian cancer, as well as patients with bowel obstruction due to non-cancer related etiology will be excluded. Data collection will include: patient demographics, tumor characteristics, treatment history, nutritional markers, MBO management and treatment outcome. Patients who underwent chemotherapy will be classified according to their antecedent treatment-free interval at the time of MBO diagnosis as either platinum-sensitive (>6 months) or platinum-resistant (≤ 6 months).

Outcomes

The primary outcome will be length of stay in hospital. Factors that are associated with shorter length of stay in hospital and shorter time to resolution of MBO will be determined. Based on this retrospective study, we will be able to determine which key areas are needed to improve the management of MBO at our institution. This will then help to formulate guidelines for best practices for management of MBO, identifying those who should be part of the decision-making in an interdisciplinary team, and standardize the treatment algorithm for these patients.