Rising Trends in Emergency Department Visits for Bowel Dysfunction in Rectal Cancer Patients: A Nationwide Emergency Department Sample Database Analysis

Author(s): Jeongyoon Moon[1], Daniel Marinescu[1], Gabriela Ghitulescu[1], Carol-Ann Vasilevsky[1], Marylise Boutros[1]

Affiliations: [1]Jewish General Hospital, McGill University, Montreal, QC, Canada

Background

- Bowel dysfunction causes major physical and emotional distress among **rectal cancer patients** with **restorative proctectomy and/or chemo/radio-therapy**
- Significant bowel dysfunction could lead rectal cancer patients to seek care in the emergency department

Methods

Design: Retrospective cohort

Data source: Nationwide Emergency Department Sample Database

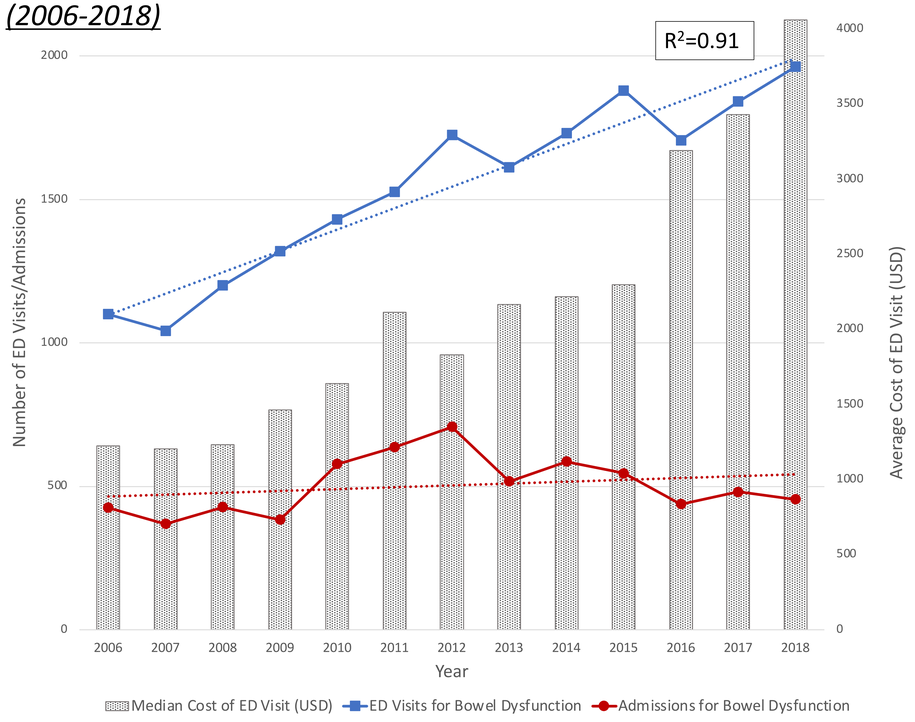
Population: Adult patients with rectal neoplasm who presented to ED

Exposures: sociodemographics, comorbidities, chemoradiotherapy

Outcomes: ED visits for bowel dysfunction

Results

National Trends in ED Visits and Admissions for Bowel Dysfunction (2006-2018)



- 541,982 rectal cancer patients with preserved bowel continuity visited ED
- 20,786 (3.8%) patients presented to ED with a primary diagnosis of bowel dysfunction
- Change in frequency of bowel movements (n=12,589, 62.7%) was the most common bowel symptom experienced
- Most patients (n=13,529, 67.4%) were discharged home from ED

Multiple Linear Regression Analysis (year=dependent)

The following factors were associated with a rising trend in ED visits for bowel dysfunction:

- Age <65y (β=0.203, p<0.001)
- # Physical Health Conditions (β=0.180, p<0.001)
- # Mental Health Conditions (β=0.203, p=0.011)
- Public Insurance (β=0.251, p<0.001)
- History of Chemotherapy (β=2.303, p<0.001)
- Lowest Income Quartile (β=0.317, p<0.001)
- Teaching Hospital (β=1.237, p<0.001)

Conclusion

- Nationwide ED visits for bowel dysfunction and associated cost are rising among patients diagnosed with rectal cancer with preserved bowel continuity
- The majority of patients are discharged home from ED
- Various sociodemographic and clinical factors are associated with the rising trend in ED visits for bowel dysfunction