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Variation in Access to Specialist Care and Risk of Surgery in Patients with Inflammatory Bowel Disease: A Population-Based Cohort Study

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Introduction

Inflammatory bowel disease (IBD; subtypes: Crohn's disease (CD) and ulcerative colitis (UC)) is a chronic disease of the gastrointestinal tract with rising prevalence among people ≥ 65 y. Rural residents, especially those ≥ 65 y, have decreased access to specialist care. Specialist care is associated with lower risk of hospitalization and surgery.

Objectives and Approach

We evaluated variation across physician networks in access to specialist care and surgery among incident patients ≥ 65 y in Ontario health administrative data. Access to specialist care was defined as: ≥ 1 outpatient visit to gastroenterologists or the majority of IBD-specific outpatient care by gastroenterologists. Variation was assessed with multilevel logistic regression and median odds ratios (MOR), adjusting for age, sex, distance from IBD physician, comorbidities, neighbourhood income, and rural/urban. Models evaluating surgical risk also adjusted for specialist care use, emergency department visits, and hospitalization at diagnosis. Network-level variables included rurality (RIO score), population colonoscopy and gastroenterologist supply.

Results

There was significant variation in having ≥ 1 gastroenterologist visit (CD $p=0.0001$, MOR 3.3; UC $p<0.0001$, MOR 3.1) and gastroenterologist providing the majority of care (CD $p=0.0001$, MOR 3.0; UC $p<0.0001$, MOR 3.7) within 12 months of diagnosis. Variation remained significant after accounting for network-level characteristics (≥ 1 gastroenterologist visit: CD $p=0.0002$, MOR 2.6, UC $p<0.0001$, MOR 2.2; majority of care: CD $p=0.0002$, MOR 2.4; UC $p<0.0001$, MOR 2.4). In CD, there was no variation in the five-year risk of surgery ($p=0.07$, MOR 1.3) and was unchanged by

network-level factors ($p=0.13$, MOR 1.3). Variation in the risk of colectomy exists for patients with UC ($p=0.016$, MOR 1.3) and was not reduced when accounting for network-level characteristics ($p=0.019$, MOR 1.3).

Conclusion/Implications

Access to specialist care among patients with elderly-onset IBD varies greatly between networks but this variation cannot be explained by differing provision of gastroenterological services across physician networks. Further research is needed to understand the factors that influence access to care and outcomes in elderly patients with IBD.