

INNOVATIVE CARE FOR INFLAMMATORY BOWEL DISEASE PATIENTS DURING THE COVID-19 PANDEMIC: USE OF BEDSIDE INTESTINAL ULTRASOUND TO OPTIMIZE MANAGEMENT

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Background: The COVID-19 pandemic has led to significant alterations in the ability to deliver outpatient care to patients with inflammatory bowel disease (IBD) including endoscopic evaluation. This has highlighted the need for alternative, accurate, non-invasive strategies to safely assess disease activity.

Aims: The aim of this study is to describe the impact of point of care intestinal ultrasound (IUS) in a university-based tertiary care IBD urgent access clinic.

Methods: We prospectively evaluated a comprehensive care pathway which incorporated outpatient sigmoidoscopy and intestinal ultrasound with the purpose of directing further ambulatory clinical care and avoiding hospitalization or hospital-based investigations including endoscopy during the COVID pandemic for patients with established IBD with symptoms suggestive of a disease flare, or those at high risk of a new diagnosis of IBD. Non-invasive markers C Reactive Protein (CRP) and fecal calprotectin (fCal) were collected where available. Patients were pre-screened for influenza-like illness, as COVID-19 testing was not available for this population during the study period. Substantial management changes were defined as addition of any medications, biologic switch/ optimization, and or referral for surgical consultation.

Results: Between March 15th and June 30th 2020, a total of 72 patients were seen in the urgent access clinic. All patients were seen within 7 days of referral. The majority were female 57% (41/72) and/ or had Crohn's disease 65.5% (47/72) (Table 1). Of these, 84.7% (61/72) underwent a substantial management change based on features of active inflammation detected by either IUS alone (53% 38/72) sigmoidoscopy alone (12.5% 9/72) or combination IUS with in-clinic sigmoidoscopy (32% 23/72) in addition to CRP and fCal. Three new diagnoses of IBD were made: one colonic

Crohn's and 2 with ulcerative colitis. One pregnant patient avoided all acute care utilization. Five patients were referred to colorectal surgery for urgent resection including two patients admitted directly for emergent operations. No patients required visits to the emergency department. Furthermore, there have been no unscheduled hospitalizations occurred in this cohort since inception March 23, 2020 til November 15th 2020.

Conclusions: The implementation of IUS in a centralized, urgent access clinic pathway resulted in efficient and meaningful changes in IBD management while sparing the need for acute care services including ER visits, need for in-hospital endoscopy, and hospitalization. The pandemic highlights the utility of this patient-center tool and supports expansion of wider IUS adoption.

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