Methods All IBD patients with endoscopic stent placement between 2011 and 2018 were included. Relevant demographic and clinical data were abstracted from the electronic medical record and presented using descriptive methods.

Results Fifteen patients (mean age 46.7; 59.75% females) including eight with refractory Crohn’s disease and seven with IPAA failure were assessed for average of 257 days after index endoscopy. Patients with refractory Crohn’s disease presented with stenotic/stricturing disease (n=3), Antroduodenal, duodenal, and ileocolonic anastomosis, fistulizing disease (n=2), colovesicular, biliary-duodenal), leak (n=1, pelvic leak/abscess) or both stenotic as well as fistulizing disease (n=2 ileal, colorctal anastomosis). Patients with IPAA failure presented with pouch strictures (n=2 pre-pouch ileum, at the ileal-pouch Anastomosis), leak/fistula (n=2 pre-pouch ileum, tip of the J pouch) or stricture and a fistula (n=3). Four of the IPAA failure were attributed to undiagnosed Crohn’s disease.

20% patients were current smokers, 26.6% on steroids, and 46.7% on immunosuppression. 46% patients were rescue cases and had previous surgeries or interventional radiology procedures prior to index endoscopy. Types of stents used: Niti-S (5), Solus double pigtail biliary (1), ureteral double-pigtail stent (2), WallFlex (1), Axios (2), Viabil (5) and ALIMAXX-ES (1); stent diameter ranged from 3.3–20 mm and length from 10–200 mm. Ten required adjunct therapy in addition to stent: APC (2), hemoclip (1), Ovesco (3), endostitch (3), dilation (3), Glue(1). 100% had immediate clinical response and 20% are currently responding to ongoing endoscopy. Patients with refractory Crohn’s disease presented with average of 257 days, 33% patients had a sustained endoscopic success (defined as ability to deploy the stent along with recanalization or no contrast leakage). On final follow up for average of 257 days, 33% patients had a sustained endoscopic response and 20% are currently responding to ongoing endoscopic management while endoscopic intervention served as an effective bridge to successful surgery in 33% patients. 14% patients failed both endoscopic and surgical interventions and are currently palliated with drains. None of the patients during endoscopic follow-up developed acute complications that could be attributed to endoscopic intervention.

Conclusions Minimally invasive endoscopic management of complicated IBD is a safe and alternative management option for otherwise high-risk for adverse outcome patients.