The First Endoscopy in Suspected Inflammatory Bowel Disease

Rebecca A. Fausel, MD[a,*], Asher Kornbluth, MD[b], Marla C. Dubinsky, MD[c]

KEYWORDS

• Endoscopy • Colonoscopy • Inflammatory bowel disease • Crohn's disease • Ulcerative colitis • Backwash ileitis • Ileoscopy

KEY POINTS

- The initial colonoscopy in IBD should include a careful perianal inspection and digital rectal examination, to assess for findings associated with perianal Crohn's disease.
- It is important to perform a thorough and systematic assessment of the mucosa throughout the colon and ileum to accurately assess the pattern and extent of disease.
- The use of a validated endoscopic scoring system for grading of endoscopic IBD activity is important for improved standardization and communication of endoscopy findings, for monitoring endoscopic response to therapy, and for prognosis.
- Histologic evaluation should include assessment for features of chronicity, including crypt architectural distortion, basal plasmacytosis, and increased cellularity of the lamina propria, and can be essential in distinguishing IBD from acute self-limited colitis.
- Upper endoscopy with biopsies should be performed in all pediatric patients with suspected IBD, and in adult patients with suspected IBD and upper gastrointestinal symptoms.

Conflict of Interest/Disclosure: Dr M.C. Dubinsky is a consultant for Janssen, AbbVie, UCB, Takeda, Celgene, Genentech, Boehringer Ingelheim, and Prometheus Laboratories. Dr A. Kornbluth has no relevant conflicts of interest or financial disclosures.

[a] The Dr. Henry D. Janowitz Division of Gastroenterology, Icahn School of Medicine at Mount Sinai, One Gustave L. Levy Place, Box 1069, New York, NY 10029-6574, USA; [b] The Dr. Henry D. Janowitz Division of Gastroenterology, Icahn School of Medicine at Mount Sinai, 1150 Fifth Avenue, Suite 1B, New York, NY 10128, USA; [c] Division of Pediatric Gastroenterology and Hepatology, Susan and Leonard Feinstein IBD Clinical Center, Icahn School of Medicine at Mount Sinai, 17 East 102nd Street, 5th Floor, New York, NY 10029, USA
* Corresponding author.
E-mail address: rebecca.fausel@mountsinai.org

Gastrointest Endoscopy Clin N Am 26 (2016) 593–610
http://dx.doi.org/10.1016/j.giec.2016.06.004 giendo.theclinics.com
1052-5157/16/$ – see front matter

INTRODUCTION

The diagnosis of inflammatory bowel disease (IBD) is based on established clinical, endoscopic, radiologic, and histologic features. In a patient presenting with suspected IBD, the initial endoscopic evaluation is an indispensable tool, valuable in determining the correct disease diagnosis, extent and severity of disease, and prognosis. The distinction between Crohn's disease (CD) and ulcerative colitis (UC) is made accurately in greater than 85% of patients, and this distinction can have important ramifications for future medical and surgical therapies.[1] The American Society for Gastrointestinal Endoscopy guidelines recommend a full colonoscopy with ileal intubation in all patients with a clinical presentation suggestive of IBD, unless contraindicated by the presence of severe colitis or toxic megacolon.[2,3] This article discusses important macroscopic findings on the first endoscopy in suspected IBD, histopathologic interpretation of biopsy specimens, endoscopic scoring systems, and prognostic implications.

PERIANAL EXAMINATION

Patients with IBD can present with a myriad of symptoms including diarrhea, rectal bleeding, abdominal pain, nausea, vomiting, weight loss, and fecal urgency. Colonoscopic evaluation is one of the first steps in assessment of these symptoms. Before the initial colonoscopy, it is important to perform a careful perianal inspection and digital rectal examination because it may reveal clues to the diagnosis of CD, including the following[4]:

- Anal skin tags, particularly type 1
- Anal fissure
- Deep anal canal ulcer
- Perianal fistula
- Perianal abscess
- Anorectal stricture

Type 1 anal skin tags are sometimes referred to as "elephant ears" and can have a varied appearance. They are present in up to 40% of patients with IBD, occurring in patients with CD, but rarely in UC.[5] They are often painless but can become painful, at times associated with exacerbation of colonic disease.[6]

Anal fissures, ulcerations in the lining of the anal canal distal to the dentate line, are present in about 30% of patients with perianal disease.[7] As with idiopathic anal fissures, these most often occur in the midline but can also occur eccentrically. Multiple, nonhealing, painless, or eccentrically located anal fissures should raise the suspicion for a diagnosis of CD.[8]

A hallmark of perianal involvement in CD is perianal fistulae, which occur in up to 45% to 50% of patients over the course of their disease and may be a presenting symptom in 20% to 30% of patients. It is more common in patients with Crohn's colitis.[9] Fistulae can arise from inflamed or infected anal glands or from penetration of fissures or ulcers of the rectum or anal canal. They may appear as abnormal perianal openings or as small pustules. Gentle compression adjacent to the orifice may express purulent material or stool. It is important to look for areas of fluctuance and tenderness, or pain on digital rectal examination, which could indicate the presence of an abscess. The development of a new perianal rigid mass in a patient with longstanding perianal disease should raise the suspicion of a perianal squamous cell carcinoma.