

# Inflammatory Bowel Disease

Samir A. Shah, MD, FACG, and Edward R. Feller, MD, FACG



**Inflammatory bowel disease (IBD)** includes two distinct enigmatic disease entities: (1) **ulcerative colitis (UC)** and (2) **Crohn's disease (CD)**. Both are characterized by chronic intestinal inflammation with periodic exacerbations and a variety of local and systemic complications. UC affects the **superficial** mucosa starting with the rectum in a continuous manner and is limited to the colon. Rectal bleeding, diarrhea, tenesmus, and abdominal cramping are the most common symptoms. In contrast, CD can affect any part of the gastrointestinal tract and is characterized by **transmural** inflammation and **granuloma** formation with areas of intervening normal mucosa (hence the term "skip lesions"). The transmural inflammation can lead to fibrosis, obstruction, microperforation, fistula and abscess. Symptoms may include crampy abdominal pain, nausea, vomiting, diarrhea, fever, weight loss, and growth retardation/delay of puberty in children/adolescents. While some symptoms of IBD can overlap with **Irritable Bowel Syndrome (IBS)**, the latter notably lacks evidence of mucosal inflammation, bleed-

ing, weight loss, nocturnal symptoms, and lab/endoscopic/radiologic abnormalities. Because IBS is common, it is not unusual to have a patient with both IBS and IBD.

Distinguishing UC from CD is important and usually straightforward. Although standard medical therapy may overlap, the surgical treatment options are distinct. In approximately 10% of patients, it is difficult to distinguish UC from CD based on the histopathology, endoscopic and clinical findings; in these cases, the term indeterminate colitis is used.

These two idiopathic diseases are estimated to affect 1.4 million Americans and result in over 100,000 hospitalizations per year. All ages, ethnic and racial backgrounds, and socioeconomic status are affected. The exact etiology of IBD remains unknown, but is thought to involve a genetic predisposition with an antigenic trigger(s) leading to a dysregulated immune response resulting in chronic intestinal inflammation. In 2001, the first gene linked to CD was identified on chromosome 16 called the CARD 15 (originally named NOD2) gene. Over 32 other candidate genes have recently been identified.

We are excited to have an update on IBD for *Medicine & Health/Rhode Island* in the next two issues and highlight the OSCCAR (Ocean State Crohn's and Colitis Area Registry) study. All the authors for these issues are involved with OSCCAR. OSCCAR

is a large, population-based inception cohort enrolling newly diagnosed IBD patients in Rhode Island (see Sands, *et al* in this issue). Despite many advances in IBD, much remains to be done. OSCCAR will hopefully lead to as important epidemiologic and clinical discoveries for IBD as the Framingham Heart study did for coronary artery disease. In this issue, we introduce and describe the ongoing, RI-specific OSCCAR study and present manuscripts reviewing IBD epidemiology, medical treatment, imaging advances as well as separate contributions on surgery for UC, and surgery for CD.

## A subsequent issue will highlight IBD

- 1) Pediatric issues;
- 2) Nutrition;
- 3) Bone Disease;
- 4) Specific Emergencies; and
- 5) Reproductive issues.

*Samir A. Shah, MD, FACG, is Clinical Associate Professor of Medicine, Warren Alpert Medical School of Brown University.*

*Edward R Feller, MD, FACG, is Clinical Professor of Medicine and Community Health, Warren Alpert Medical School of Brown University, and Director, Division of Gastroenterology at Miriam Hospital.*

## Disclosure of Financial Interests

Samir A. Shah, MD. Speaker's bureau: Abbott, Elan, Procter&Gamble, Prometheus, UCB.

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## CORRESPONDENCE

Samir A. Shah, MD, FACG  
Gastroenterology Associates, Inc.  
44 West River Street  
Providence, RI 02904  
phone: (401) 274-4800  
e-mail: samir@brown.edu

