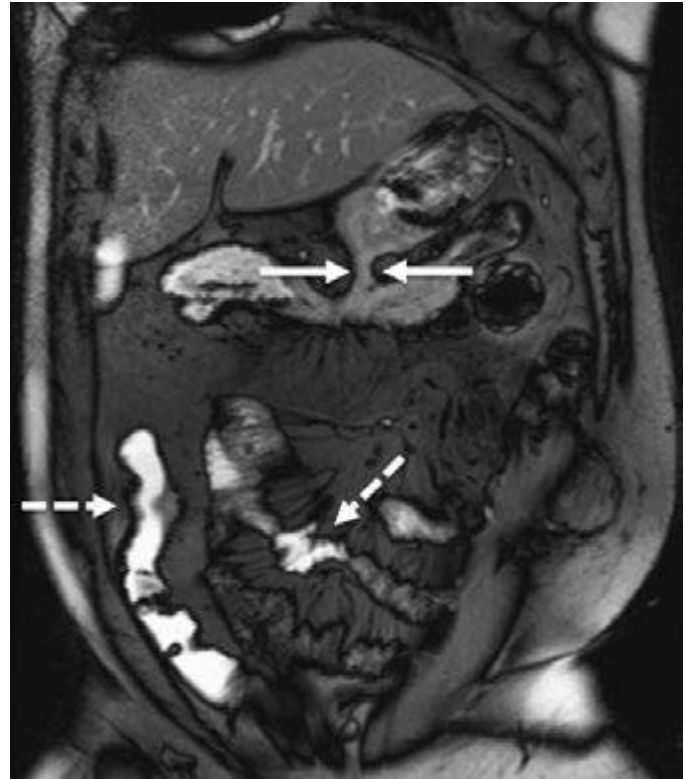




**FIGURE 351-9** A coronal magnetic resonance image was obtained using a half Fourier single-shot T2-weighted acquisition with fat saturation in a 27-year-old pregnant (23 weeks' gestation) woman. The patient had Crohn's disease and was maintained on 6-mercaptopurine and prednisone. She presented with abdominal pain, distension, vomiting, and small-bowel obstruction. The image reveals a 7- to 10-cm long stricture at the terminal ileum (white arrows) causing obstruction and significant dilatation of the proximal small bowel (white asterisk). A fetus is seen in the uterus (dashed white arrows). (Courtesy of Drs. J. F. B. Chick and P. B. Shyn, *Abdominal Imaging and Intervention*, Department of Radiology, Brigham and Women's Hospital, Harvard Medical School, Boston, Massachusetts; with permission.)

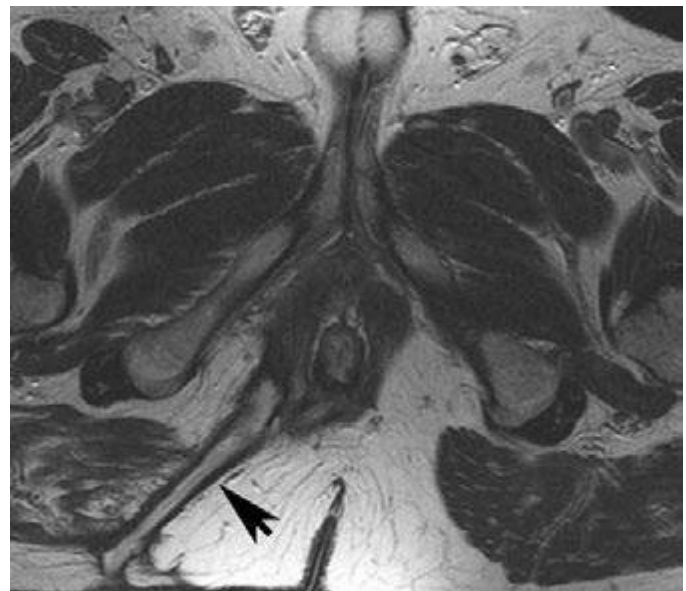


**FIGURE 351-10** A coronal balanced, steady-state, free precession, T2-weighted image with fat saturation was obtained in a 32-year-old man with Crohn's disease and prior episodes of bowel obstruction, fistulas, and abscesses. He was being treated with 6-mercaptopurine and presented with abdominal distention and diarrhea. The image demonstrates a new gastrocolic fistula (solid white arrows). Multifocal involvement of the small bowel and terminal ileum is also present (dashed white arrows). (Courtesy of Drs. J. F. B. Chick and P. B. Shyn, *Abdominal Imaging and Intervention*, Department of Radiology, Brigham and Women's Hospital, Harvard Medical School, Boston, Massachusetts; with permission.)

perinuclear antineutrophil cytoplasmic antibodies (pANCA) and anti-*Saccharomyces cerevisiae* antibodies (ASCA). Unfortunately, these serologic markers are only marginally useful in helping to make the diagnosis of UC or CD and in predicting the course of disease. For success in diagnosing IBD and in differentiating between CD and UC, the efficacy of these serologic tests depends on the prevalence of IBD in a specific population. pANCA positivity is found in about 60–70% of UC patients and 5–10% of CD patients; 5–15% of first-degree relatives of UC patients are pANCA positive, whereas only 2–3% of the general population is pANCA positive. Sixty to 70% of CD patients, 10–15% of UC patients, and up to 5% of non-IBD controls are ASCA positive. In a patient population with a combined prevalence of UC and CD of 62%, pANCA/ASCA serology showed a sensitivity of 64% and a specificity of 94%. Positive and negative predictive values (PPVs and NPVs) for pANCA/ASCA also vary based on the prevalence of IBD in a given population. For the patient population with a prevalence of IBD of 62%, the PPV is 94%, and the NPV is 63%.

Other serologic tests include antibodies to *Escherichia coli* outer membrane porin protein C (OmpC), which is found in 55% of CD patients; antibodies to I<sub>2</sub>, a homologue of the bacterial transcription factor families from a *Pseudomonas fluorescens*-associated sequence that is found in 50–54% of CD patients; and anti-flagellin (anti-CBir1) antibodies, which have been identified in approximately 50% of CD patients.

Children with CD positive for all four immune responses (ASCA+, OmpC+, I<sub>2</sub>+, and anti-Cbir1+) may have more aggressive disease and a shorter time to progression to internal perforating



**FIGURE 351-11** Axial T2-weighted magnetic resonance image obtained in a 37-year-old man with Crohn's disease shows a linear fluid-filled perianal fistula (arrow) in the right ischioanal fossa. (Courtesy of Dr. K. Morteale, *Gastrointestinal Radiology*, Department of Radiology, Brigham and Women's Hospital, Boston, Massachusetts; with permission.)