Inflammatory bowel disease in children and adolescents

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1 Diagnostic delay is common in pediatric inflammatory bowel disease

The incidence of pediatric inflammatory bowel disease is rising in Canada and internationally; subtypes include Crohn disease, ulcerative colitis and unclassified. In a prospective study involving a tertiary centre cohort in Toronto, time to diagnosis was longer in cases of Crohn disease than in ulcerative colitis (6.8 v. 2.4 mo, respectively).[1] For Crohn disease, diagnostic delay was associated with height impairment 1 year after presentation.[1]

2 Extraintestinal manifestations of pediatric inflammatory bowel disease can occur before diagnosis

Most patients will present with diarrhea (bloody in ulcerative colitis and nonbloody in Crohn disease) and pain. Extraintestinal manifestations occur in about 5%–10% of patients before diagnosis; arthritis and aphthous stomatitis are reported more frequently before diagnosis, and osteopenia is reported more frequently after diagnosis.[2] The lifetime incidence of at least 1 extraintestinal manifestation is about 25%.[2]

3 The presence of perianal disease can be a highly specific finding when Crohn disease is suspected

About 15% of pediatric patients with newly diagnosed Crohn disease have perianal disease within 30 days of diagnosis, two-thirds with fistulas and abscesses.[3]

4 Once infection has been excluded, investigation of nonbloody diarrhea lasting longer than 2 weeks should be started in primary care[4]

About 80% of children with pediatric inflammatory bowel disease will have 1 or more of the following: anemia, raised erythrocyte sedimentation rate, raised C-reactive protein level, thrombocytosis and hypoalbuminemia.[5] Tissue transglutaminase immunoglobulin A (IgA) and total serum IgA testing will aid investigation of celiac disease; serology will be normal in irritable bowel syndrome.

5 Fecal calprotectin testing can aid in the diagnosis, as high levels indicate intestinal mucosa inflammation

Calprotectin is a neutrophil protein biomarker found in stool. Once infection has been excluded, patients with diarrhea should have fecal calprotectin testing to help stratify for urgent or routine evaluation by a specialist.[6] In one meta-analysis, raised fecal calprotectin levels (> 250 µg/g) had an overall sensitivity of 0.90 and specificity of 0.85 for diagnosing pediatric inflammatory bowel disease.[6]

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