

CLINICAL CASE ROUNDS IN CHILD AND ADOLESCENT PSYCHIATRY

Delayed Diagnosis of Crohn's Disease in an Adolescent: Psychiatric Implications

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Introduction

Somatoform disorders comprise a group of psychiatric illnesses in which patients report physical symptoms that cannot be fully accounted for by a known medical condition. In children and adolescents somatization can result in significant disability and functional impairment including poor academic performance and serious emotional and behavioural psychopathology (Campo et al., 1999). Somatization is common in children and adolescents. The Ontario Child Health Study demonstrated a somatization syndrome in 4.5% of boys and 10.7% of girls ages 12 to 16 (Offord et al., 1987). Unnecessary medical and surgical procedures are often performed on patients with somatoform disorders and may lead to iatrogenic complications.

When arriving at a diagnosis of somatoform disorder, it is necessary to rule out an organic etiology that may explain the patient's presentation. In 1965, Eliot Slater found that 33% of patients diagnosed with conversion disorder later went on to develop a physical illness that could account for their symptoms. More recent estimates are much smaller showing that less than 10% of conversion disorders are later found to have an organic basis (Stone et al., 2005).

We report a case of a patient presenting with gastrointestinal symptoms who was originally diagnosed with somatoform disorder but was later found to have an organic basis for her illness.

Case

This case report has satisfied the ethical requirements of the Hamilton Health Sciences/Faculty of Health Sciences Research Ethics Board at McMaster University.

Jessica is a 16-year-old female who presented to hospital with abdominal pain, nausea, vomiting, and weight loss. She described having experienced intermittent abdominal symptoms accompanied by nausea, vomiting and weight loss of 30 pounds over a one year period. There was no history of diarrhea, blood, or mucous in the stool, and there were no other systemic symptoms. There was no family history of gastrointestinal disease. An organic etiology was initially suspected and laboratory workup was performed to rule out an inflammatory process including inflammatory bowel disease. All blood work was normal including Jessica's erythrocyte sedimentation rate (ESR). Upon admission to hospital, an upper endoscopy was also performed which revealed no abnormalities and a biopsy showed a normal stomach, esophagus, and duodenum with no significant pathology. Since no organic etiology could be found to explain Jessica's presentation, psychiatry was consulted.

Upon psychiatric assessment, Jessica noted that her symptoms often worsened in the context of situational stressors, most specifically interpersonal conflict with her parents. She also commented that her gastrointestinal symptoms would generally increase in intensity when she was feeling sad or anxious. Although Jessica did not meet criteria for a major depressive

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Submitted: March 1, 2010; Accepted: June 11, 2010

episode, she described herself as someone who worried about being judged by others and said that she avoided social and performance situations. She had not attended school for two years due to anxiety and parents were not able to enforce her attendance. Jessica did not meet criteria for any other anxiety disorders and also denied any specific worries around food that may have caused the weight loss, such as fear of contamination with food or fear of texture of food. Jessica denied any intentional weight loss and did not endorse distortion of body image. While in hospital, Jessica did not demonstrate any resistance when challenged with renourishment. Jessica was diagnosed with somatoform disorder NOS and social phobia. She was started on fluoxetine and olanzapine. Both her gastrointestinal symptoms and her anxiety improved initially and quite dramatically.

Over the subsequent seven months, Jessica had three further hospital admissions with similar presentations of abdominal pain accompanied by nausea, vomiting and weight loss. Given Jessica's social anxiety, we considered that she may have had difficulty reporting symptoms of diarrhea for fear of embarrassment, however her bowel movements were monitored by nursing staff during each admission, and there was no evidence of diarrhea. Jessica described increased conflict at home coinciding with each exacerbation of her illness. Jessica's parents both abused alcohol and had a long-standing history of separating and reconciling which created a very inconsistent and unstable home environment for Jessica.

During Jessica's most recent admission additional investigation was prompted by a new and persistently elevated ESR as well as new aphthous and perianal ulcers. A small bowel study was performed and showed an abnormal mucosal pattern with small aphthous ulcers in the terminal ileum consistent with a diagnosis of Crohn's disease. Treatment was initiated with prednisone and azathioprine. After initiating treatment, Jessica's symptoms subsided within one week and she was subsequently discharged from hospital with a plan to follow up with pediatric gastroenterology, adolescent medicine, and psychiatry. Her discharge diagnoses were Crohn's disease and social phobia.

Discussion

Crohn's disease is an inflammatory disease of the intestine and can affect any area of the gastrointestinal tract. Common symptoms include abdominal pain, diarrhea, rectal bleeding, anorexia, and weight loss (Sato and Kugathasan, 2005). Gastrointestinal symptoms are also common in somatoform disorders, anxiety disorders, and anorexia nervosa, although severe weight loss is only typical in anorexia nervosa (American Psychiatric Association, 2000). This case describes a complex presentation of abdominal symptoms, anxiety, and excessive weight loss in the context of multiple psychosocial stressors associated with exacerbations of medically unexplained gastrointestinal symptoms.

There is some evidence that psychological factors are associated with Crohn's disease (Mawdsley and Rampton, 2005) and this may complicate the clinical picture. Studies suggest that patients with Crohn's disease have increased rates of depressive and anxiety symptoms compared with healthy controls (Maunder, 2005). Steinhausen and Kies (1982) found increased emotional disorder in children with inflammatory bowel disease (Crohn's disease and ulcerative colitis) as compared with physically normal children. Raymer et al. (1984) found depression and low self-esteem in children with Crohn's disease. If patients with undiagnosed Crohn's disease present with prominent mood and anxiety symptoms, abdominal symptoms may be more likely to be attributed to psychiatric rather than organic causes.

Two studies have investigated the possibility that situational stressors may contribute to disease onset in Crohn's disease. A population-based case-control study by Lerebours et al. (2007) showed that stressful life events were more frequent in the 6-month period prior to receiving a diagnosis of Crohn's disease; however, after controlling for depression, anxiety, smoking status, and sociodemographic factors, this association was no longer significant. An epidemiological study examined the etiological role of psychological stress, specifically child loss, on the risk of developing inflammatory bowel disease. In this population-based study, the risk of developing inflammatory bowel disease in parents who had lost a child was not increased following this event relative to matched control parents (Li et al., 2004).

Weight loss is also a criterion for anorexia nervosa, and this diagnosis was considered as well. Since young people with anorexia nervosa often deny body image concerns, the diagnosis can be difficult. In addition, eating disorders are much more common in this age group compared to Crohn's disease, adding to this diagnostic dilemma. The incidence of inflammatory bowel disease is 7 per 100000 children (Sato and Kugathasan, 2005), while the lifetime prevalence of anorexia nervosa is 0.9% in women (Hudson et al., 2007). Although there are case reports of inflammatory bowel disease presenting as anorexia nervosa, the literature suggests that overall, Crohn's disease co-occurs infrequently with an eating disorder [(Baylé and Bouvard, 2003), (Jenkins et al., 1988)]. Furthermore, a diagnosis of Crohn's disease may be delayed if anorexia and weight loss, without disturbance of body image, are incorrectly attributed to anorexia nervosa (Mallett and Murch, 1990).

The above case should remind clinicians to consider revisiting a diagnosis of organic disease including Crohn's disease in the case of unexplained abdominal symptoms that do not resolve with treatment. Crohn's disease can progress over time and later investigation can uncover an organic cause for abdominal symptoms that was not apparent at first evaluation.

In addition, psychological stressors and symptoms should not distract from the diagnosis of organic illness, but rather should be a focus of additional clinical attention.

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