
Communications

Diverticular Disease in Younger Adults

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Diverticular disease most commonly presents in that patient population aged over 50 years. The diagnosis of diverticular disease in the 29-year-old patient reported below illustrates the need for primary care physicians to be aware that deviations from expected presentations occur and that a willingness to accept the unusual, coupled with a heightened awareness, will help reduce diagnostic delays and consequent patient morbidity.

Case Report

A 29-year-old white man was admitted with a three-day history of lower and mid abdominal pain radiating only to the epigastrium and accompanied by profuse sweating. These symptoms were unrelated to eating. On the morning of admission the patient was awakened by severe abdominal pain accompanied by shaking chills and nausea, relieved after a loose, mucoid bowel movement and by lying on the right side.

His past history revealed a similar episode six years prior to admission, diagnosed by his physician as "colitis." Details of treatment and clinical course were not available.

On physical examination at the time of admission, the patient was noted to be a well-nourished white man in acute distress with intermittent abdominal cramping. Vital signs showed a blood pressure of 140/76 mmHg, a pulse rate of 112 beats/min, respirations of 48/min with splinting,

and a temperature of 98.2° F. Positive findings were limited to the abdomen. Bowel sounds were active. Palpation revealed voluntary guarding with greater tenderness in the right lower quadrant than the left. No organomegaly or masses were noted. Peritoneal signs and rebound tenderness were present on initial examination but diminished by the next day. The rectal examination was normal.

Admission laboratory results included a white blood count of $17.3 \times 10^3/\mu\text{L}$ with 77 polymorphonuclear cells, 3 band cells, 18 lymphocytes, and 2 eosinophils, and an erythrocyte sedimentation rate of 34 mm/hr. Serum electrolytes, urinalysis, clotting studies, and blood chemistries including serum amylase were within normal limits except for elevated lactic acid dehydrogenase (319 mU) and glucose (152 mg/dL), which were normal on repeat testing. A stool sample was positive for occult blood.

A flat plate of the abdomen was interpreted as within normal limits. Contrast studies were deferred because of the acute symptomatology.

The hospital course after admission was characterized by diminished abdominal symptoms and a persistently elevated white blood count and erythrocyte sedimentation rate.

A laparotomy was performed on the second hospital day. The appendix was found to be normal, but fecal matter was noted on the left side of the abdominal cavity. A perforated sigmoid diverticulum with abscess formation and extensive acute serositis was encountered and surgically removed, using the Hartman procedure, leaving a left-sided colostomy. The patient's postoperative hospital course was uneventful except for a minor wound infection, which responded well to conservative treatment. The patient was readmitted eight weeks later for uncomplicated reanastomosis of the colostomy.

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Comment

Many disease conditions have a well-defined age, sex, ethnic, or symptomatic presentation. When the demographic characteristics of a patient with such an illness deviate from the expected, diagnosis and treatment may be significantly delayed while statistically more likely possibilities are explored.

Diverticular disease of the colon is encountered predominantly in persons aged over 40 years, with the incidence in the general population increasing from approximately 5 to 15 percent at 50 years to about 65 percent at 85 years in one study¹ and 50 percent at 90 years in another.² Consequently, this illness is often initially misdiagnosed in the younger patient because of a low index of suspicion for patients younger than 40 years despite an otherwise typical presentation.³⁻⁵ In two separate series the incidence of the disease ranged from none below the age of 35 years to almost 9 percent under 40 years.⁷ Diverticular disease was rarely considered initially in these younger patients primarily because of their younger age. In this group of patients, the erroneous admission diagnoses included functional bowel disease, appendicitis, acute pyelonephritis, pelvic inflammatory disease, and pancreatitis.^{4,5,8,9}

Opinions differ whether diverticular disease of the colon is intrinsically more dynamic in the younger patient, therefore requiring a more aggressive treatment,^{1,4,10,11} or whether the complications seen arise from diagnostic delays without which the condition would otherwise have responded satisfactorily to medical treatment alone.⁵ In support of an aggressive surgical approach is a study showing that after a 27-month follow-up period, over one half of the patient group was readmitted for complications, and almost 25 percent of these had initially been managed medically. It was concluded that there was a greater hazard in medical management alone than with colonic resection of the diverticulum on presentation, which avoided later complications.⁹

Diverticular disease had also been described by some authors in relation to Marfan's syndrome, suggesting an elastic collagen tissue defect as a predisposing factor to the disease in the young.^{12,13} Further observations will be needed to confirm this correlation.

In a general review of the medical literature for

the past five years, no reports or discussions of diverticular disease in the younger adults have appeared in major journals directed to primary care physicians. The purpose of this report is to call attention to the potential occurrence of this relatively common disease in an atypical age group. A willingness to consider diverticular disease as a presumptive diagnosis, rather than as part of a larger differential list or not at all, could reduce further complications. Diagnosing diverticular disease in the young patient is not more difficult than diagnosing the disease in an older patient. Both age groups present with the disease similarly and require identical diagnostic modalities. The critical step is considering diverticular disease in an unusual age group during the initial patient encounter.

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