Case Report
Arthritis as an Extra-Intestinal Manifestation of Acute Sigmoid Diverticulitis
Mikhail Joutovsky, D.O., Vithal V Vernenkar, D.O.
Department of Surgery, St. Barnabas Hospital, Bronx, NY

Introduction

The association between idiopathic inflammatory bowel disease or other disease of the colon such as infectious colitis and complications outside the gastrointestinal tract has been recognized since the early 1900s. These usually involve joints and the skin, the so-called "extra-intestinal manifestations". Acute diverticulitis is an inflammatory and infectious condition of the colon, but it’s association with the arthritis (1-2) has rarely been observed.

We present a case where debilitating arthritis promptly improved after surgical resection of sigmoid colon.

Case Report

60 year-old female presented with complaints of lower abdominal pain for several days mostly in left lower quadrant with nausea and vomiting, no fever or chills, decreased oral food intake, decreased appetite. Patient was also complaining of debilitating arthritic pain in bilateral knees, wrists, shoulder which dot much worth with beginning of abdominal complaints. Patient bakes for a living.

On physical examination, there was localized tenderness in the left lower quadrant of the abdomen. The white blood cell count was 17.6 with 86% polymorphonuclear component. A CT scan of abdomen showed sigmoid diverticulitis with adjacent droplets of pneumoperitoneum and infected phlegmon demonstrating early sign of abscess formation. A diagnosis of active diverticulitis, with abscess formation was made and medical treatment with bowel rest and intravenous metronidazole and levafloxacin was started. Abscess was successfully drained by CT guided drainage catheter placement.

Patient was soon discharged home in stable condition but shortly after that readmitted with recurrent abscess. At this time Sonogram guided drainage was successfully performed and patient was discharged home shortly after procedure. Patient was seen in clinic and scheduled for surgery as outpatient. Extended Sigmoid Resection with end to end primary anastomosis was performed with no complications. Pathology showed Diverticular disease of colon with perforated diverticula, which is completely sealed off by fibrous tissue and within the pericolic fat.

At the time of operation, neither abdominal symptoms nor fever were noted and the abdominal examination was unremarkable. However joint-related symptoms persisted unchanged from the onset.

Two days after surgery, the joint-related symptoms regressed significantly. No recurrence of joint or bowel symptoms was recorded on follow-up visits and 12 months later patient is asymptomatic.

Discussion

As was noticed above the association between acute diverticulitis and arthritis has rarely been reported. The PubMed search performed from 1970 to 2006 and only 6 cases were found (1-3). The clinical presentation and postoperative regression was similar to previously described 5 out of 6 cases. Presentation of Arthritis in described cases was both mono- and pauciarticular (as in our case). Most of the symptoms were described in knees, ankles, wrists (1-3).

As in our case a pericolic abscesses communicating with a ruptured diverticulum were a typical finding in patient with acute diverticulitis and extra-intestinal manifestation.

Our case support the data collected in previous publications that colon resection bring such extra-intestinal manifestation as arthritis to complete regression and should be consider early in order to treat both the colon and joint disease.

Summary

The clinical history of our case was similar to that of previously described cases. Resection of the diverticulitis- affected colon determined complete resolution of joint disease in 6 of these patients. In the remaining patient, combined antibiotic therapy was sufficient to resolve both acute diverticulitis and arthritis (2). NSAID and corticosteroid treatment were used as the primary therapeutic approach (3; 2; 5) in each patient described. Excluding a partial reduction of pain, however, anti-inflammatory drugs had no effect on joint disease. The limited effectiveness of the medical approach is in frank contrast with the prompt and definitive resolution of the joint disease after colon resection (2; 3; 5).

REFERENCES:


Abstract

Acute diverticulitis is an inflammatory and infectious condition of the colon, but it’s association with the arthritis (1-2) has rarely been observed.

We present a case where debilitating arthritis was promptly improved after surgical resection of sigmoid colon. Arthritis promptly improved after surgical resection of sigmoid colon, and 12 month later patient is free of symptoms. Conclusions: 6 cases of diverticulitis-related arthritis were reported. This case reconfirm that surgical intervention, sigmoid resection in our case, improves arthritic symptoms.