

# A Case of Severe Ischemic Colitis Caused by Systemic Lupus Erythematosus

Pages with reference to book, From 271 To 272

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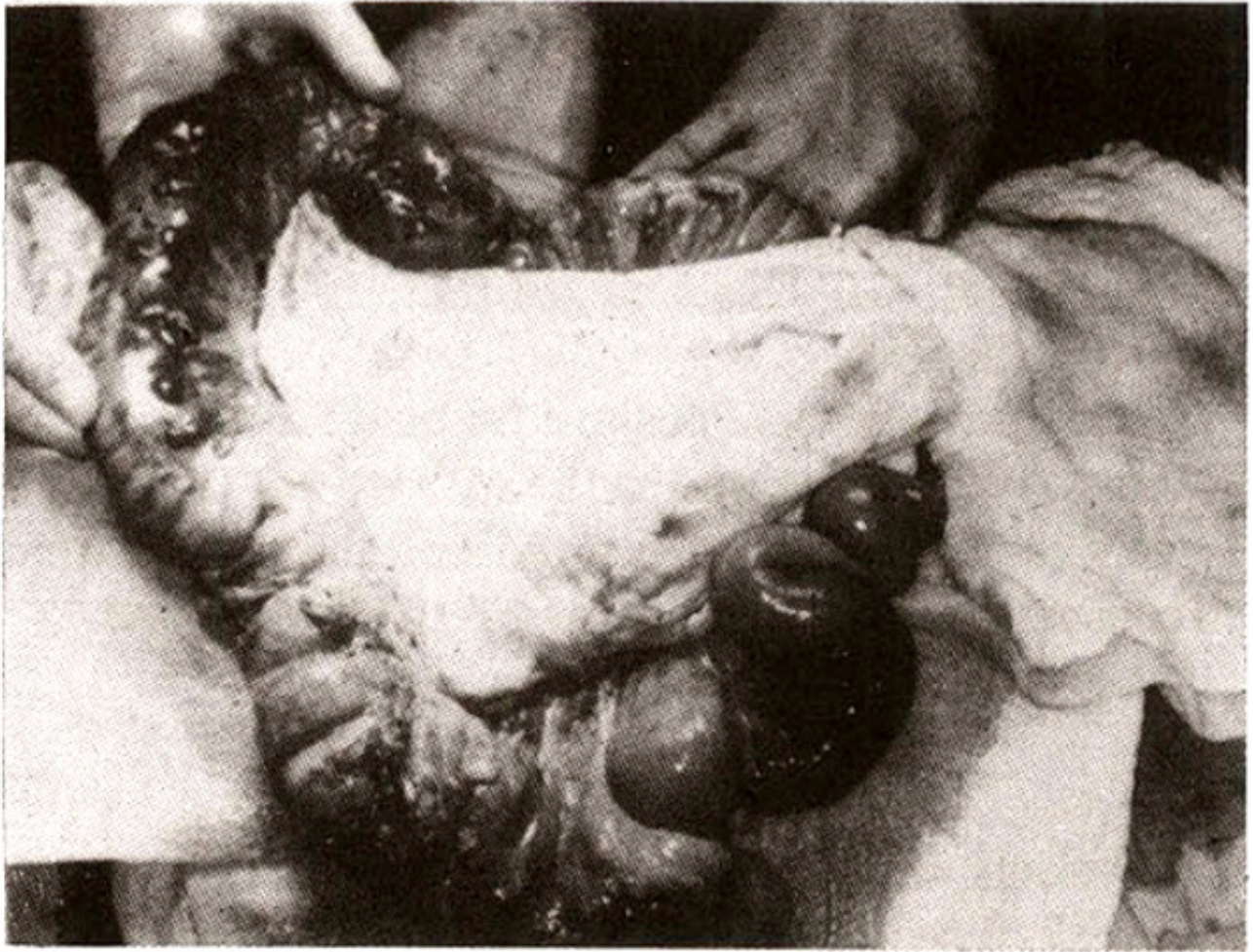
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## Introduction

Systemic lupus erythematosus (SLE) is characterized by a wide range of clinical manifestations. Nearly in half of patients, gastrointestinal (GI) symptoms such as abdominal pain, nausea, vomiting, diarrhea are encountered and one can rarely meet acute abdominal signs requiring laparotomy caused by GI vasculitis of SLE<sup>1-3</sup> We report here a case who presented with acute abdomen with known history of SLE.

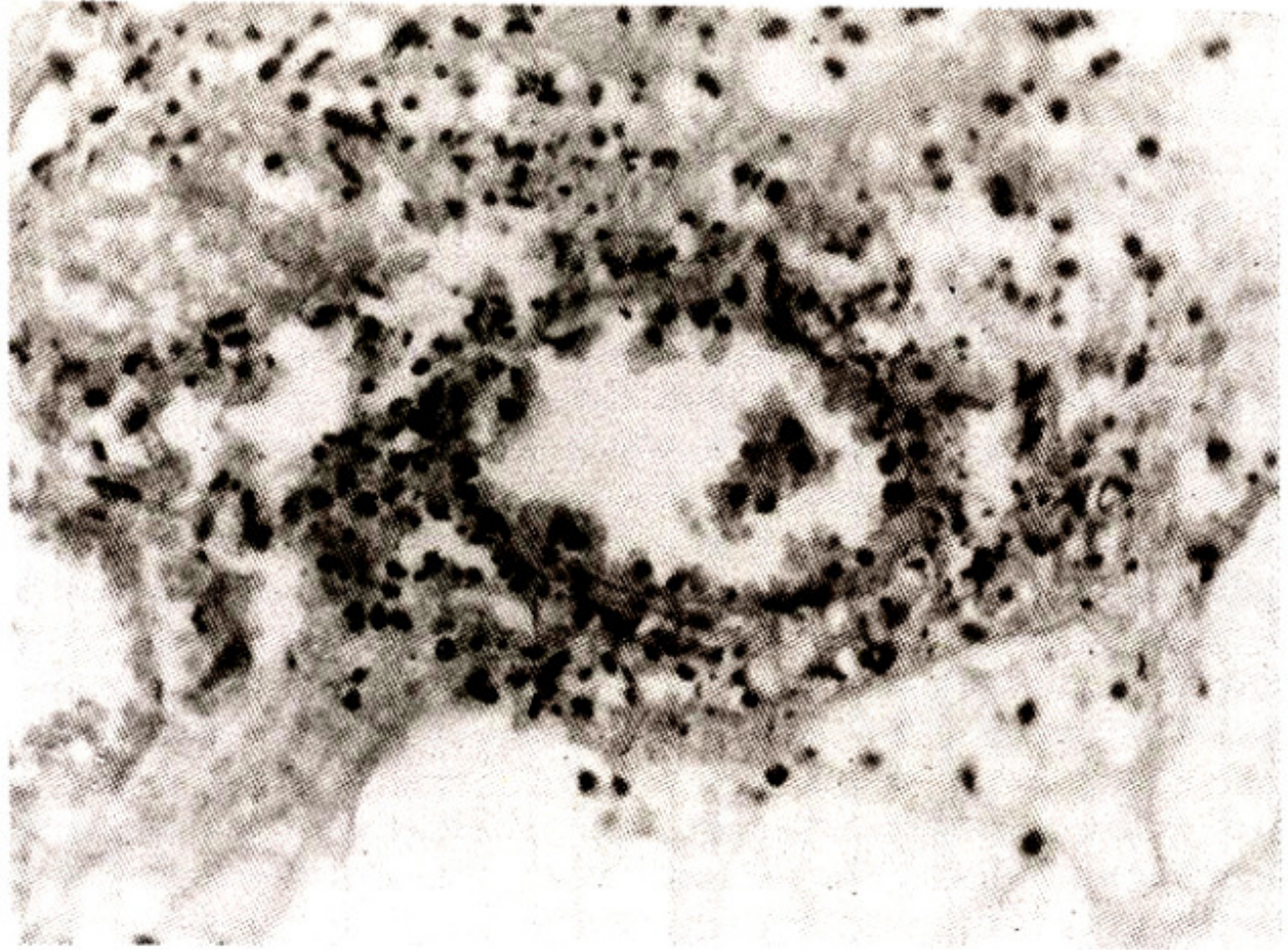
## Case report

A diagnosis of SLE was made in a 30 year old woman in 1992 when she presented with polyarthralgia and skin eruptions especially significant on her face. She complained of occasional cramp-like abdominal pain, nausea, vomiting and mucorrhea. Investigations revealed an ESR of 62 mm, a haemoglobin of 10 g/dl and positive antinuclear antibody in a dilution of 1:640 granular. Serum complement levels of C3 and C4 were 72 and 10.3 u/l, respectively (Normal level of C3:50-90 u/l C4: 10-40 u/l). Serum IgA was 340 mg/dl and serum IgG was 152 mg/dl. A barium enema showed no abnormality except spasticity in caecum. Although SLE was considered to be the first diagnosis in this case, colonoscopy was planned in order to rule out any other inflammatory bowel disease. During the period of bowel preparation for colonoscopic evaluation, she developed acute abdomen and was operated. At laparotomy, multiple small areas of ischemia especially at sites of terminal ileum and splenic flexum of colon were observed, but there was no evidence of GI tract perforation (Figure 1).



**Figure 1. Multiple small areas of ischemia, especially at sites of terminal ileum and splenic flexura of colon but no evidence of GI perforation.**

The ischemic areas of terminal ileum and colon appeared non-viable after initial exploration of thirty minutes and subtotal colectomy with ileostomy and sigmoid mucous fistula were performed. In early postoperative period, the patient was treated with a course of cyclophosphamide and methylprednisolone. Then, resochin was added to this regimen. Seven months later sigmoidectomy with ileorectal anastomosis was performed. After the second operation she was given immuran. The patient is on medical treatment and close clinical follow-up. Histopathologic examination of the resected specimen revealed leucocytoclastic vasculitis showing vasculitis in sub mucosal vessels causing severe colonic ischemia (Figure 2).



**Figure 2. Lesion demonstrates leucocytoclastic vasculitis.**

## **Discussion**

In SLE, accumulation of circulating immune complexes cause vasculitis of small arteries and veins leading to focal ischemia, necrosis and perforation<sup>4</sup>. Because of relatively poor blood flow, ischemic lesions are more frequent in left colon<sup>5</sup>. The most common abdominal symptom of SLE is pain<sup>6</sup>. Additionally, anorexia, nausea, vomiting, diarrhea and melena can be encountered<sup>7</sup>. The diagnosis of an acute surgical abdomen due to SLE could be made with confidence only when the patient had concomitant disease activity in other organs<sup>8</sup>. Management of the acute abdominal manifestations of SLE is a difficult therapeutic and surgical challenge. In a patient with proven SLE and acute abdominal symptoms, there may be a role for high dosage steroid therapy as the lesions are produced by an immune complex induced vasculitis<sup>9</sup>. Depending upon the surgeon's judgement for viability, resection or conservative management should be preferred. Our case, presented with acute abdomen which necessitated laparotomy. Therefore, it should always be considered that SLE can cause acute abdomen leading to an urgent emergency surgery.

## **References**

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