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Pseudomembranous collagenous colitis

Psödomembranöz kollajenöz kolit

To the Editor,

Pseudomembranous collagenous colitis is a rare type of colitis and has been described as a distinct entity within the last decade. It is histologically characterized by thickening of the subepithelial collagen and formation of pseudomembranes (1). We report a very rare case of pseudomembranous collagenous colitis.

The patient was a 63-year-old male with the chief complaint of diarrhea and hematochezia for one week. He had a history of long-standing abdominal pain. The physical examination was unremarkable. Microscopic examination of the fecal samples showed erythrocytes and leukocytes. The remaining laboratory tests were within normal limits. Colonoscopy revealed mucosal hyperemia and foci of subepithelial hemorrhage and erosions throughout the colon, suggesting the endoscopic diagnosis of inflammatory bowel disease (Figure 1). Three endoscopic biopsies from the sigmoid colon, transverse colon and cecum were obtained for the histologic examination. Light microscopic examination of the biopsies showed prominent thickening of the subepithelial collagen (25-40 micron) in all samples, and it was proven by Masson trichrome stain (Figures 2A, B, C). Volcano-like eruptive inflammatory exudates including neutrophils and fibrin were observed on the surface of the colonic mucosa (Figure 2A). *Clostridium difficile* toxin was negative. The patient was treated with oral mesalazine (3x1 g p.o. daily) and fluocortolone for six months. His symptoms resolved during this period and fluocortolone was discontinued. He was put on maintenance therapy with mesalazine (3x500 mg p.o. daily) and has no symptoms currently.

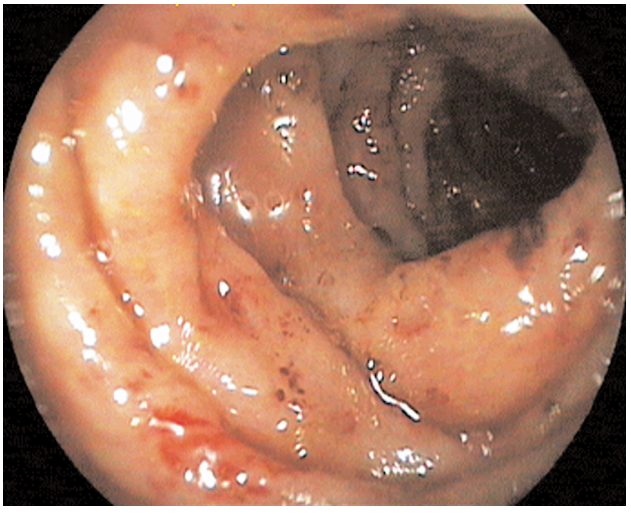

Figure 1. Colonoscopy showing hyperemia and multiple ulcerations.

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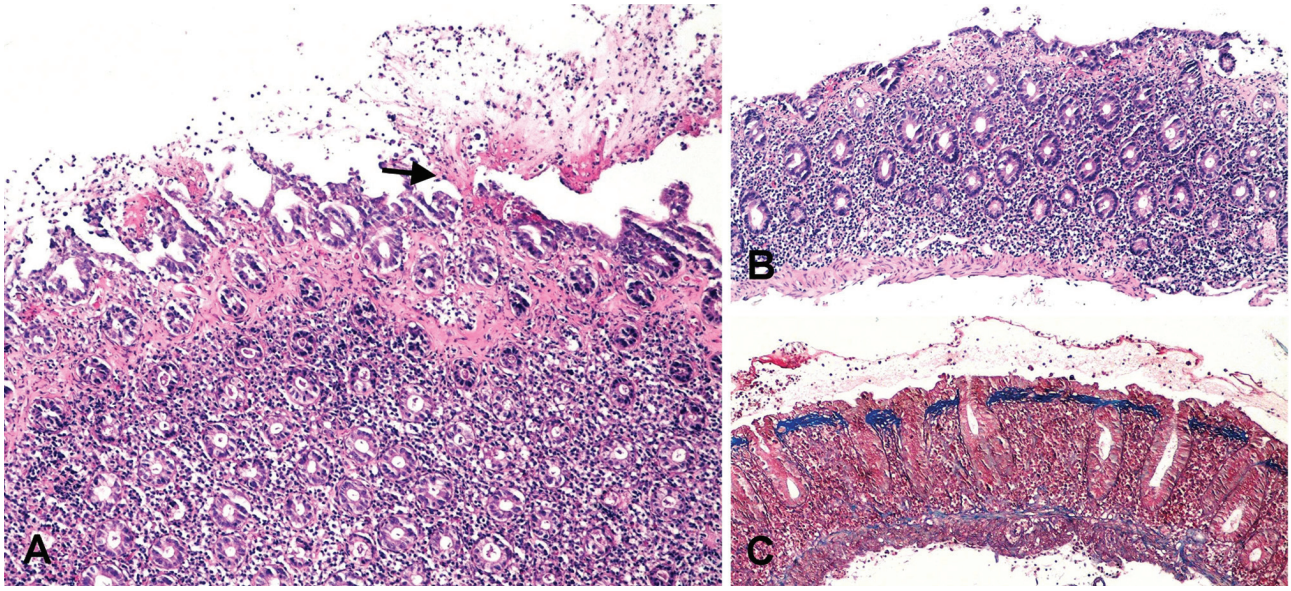

Figure 2. (A) Light microscopy showing eruptive exudate and **(B)** thickening of the subepithelial collagen, which was further proven with Mason trichrome stain **(C)**.

Collagenous colitis is a well-known type of colitis and is defined as subepithelial collagen thickening in patients with chronic watery diarrhea. Collagenous colitis has been reported in association with other types of colitis, including lymphocytic colitis and inflammatory bowel disease (2,3). However, pseudomembrane formation is rare in collagenous colitis, and it is described as a new entity -- pseudomembranous collagenous colitis (1).

The etiology of pseudomembranous collagenous colitis is unclear, but a single case in the literature was reported to have positivity for *C. difficile* toxin. Other reported cases were not associated with C. difficile infection, similar to our patient. Ischemia, uremia, drugs, and Escherichia coli O157:H7 infection are other well-known causes of pseudomembranous formation in the colon. The hypothesis that collagenous colitis is caused by a toxic and/or ischemic mechanism was suggested (4). However, no specific etiology was identified for the development of the pseudomembranes in pseudomembranous collagenous colitis. Therefore, authors accepted that pseudomembrane formation in pseudomembranous collagenous colitis is a part of the spectrum of the collagenous colitis itself (5).

Endoscopic features of the pseudomembranous collagenous colitis include inflammation and ulceration, in contrast to classical collagenous colitis, which is characterized by normal or near-normal colonic mucosa (2,6). Pseudomembranous collagenous colitis closely resembles inflammatory bowel disease, and other differential diagnoses include infectious colitis, pseudomembranous colitis, ischemic colitis, and drug-associated colitis. Light microscopic features of this disease include pseudomembrane formation, which is characterized by eruptive exudate composed of neutrophil leukocytes, necrotic debris and fibrin at the luminal surface of the colonic mucosa, thickening of the subepithelial collagen, which usually exceeds 10 micron, and entrapment of the superficial mucosal vessels. Masson trichrome stain is helpful in highlighting the thickened subepithelial collagen (5,7).

Treatment strategies for pseudomembranous collagenous colitis differ from the pseudomembranous colitis. Combinations of antiinflammatory agents and corticosteroids are useful in the treatment of this disease, and budesonide, loperamide, mesalamine, sulfasalazine, and cholestyramine can be used for the remission of the disease (1,5).

In conclusion, pseudomembranous collagenous colitis is a distinct type of colitis that must be taken into consideration in the differential diagnosis of colitis with pseudomembrane formation.

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Pancreatic tuberculosis mimicking inoperable pancreatic cancer

İnoperable pankreas kanseri ile karışan pankreas tüberkülozu

To the Editor,

Tuberculosis is an infectious disease caused by *Mycobacterium tuberculosis,* also known as Koch bacillus (1). This disease is a public health problem in emerging countries, and due to its reemergence with the appearance of acquired immunodeficiency syndrome (AIDS), it is also a problem in developed countries (2). It is most often seen in the lungs and with necrotic granulomas. Extrapulmonary tuberculosis accounts for 10-30% of all cases (3). More than 5% of patients with tuberculosis have abdominal involvement (4). In the abdominal cavity, it usually affects the peritoneum, gastrointestinal tract (especially ileum and cecum), liver, spleen, and lymph nodes (1,3). Pancreatic and peripancreatic involvements are rare (2). There is often confusion between pancreatic tuberculosis and malignancy, both clinically and radiologically. A review of 58 patients with pancreatic tuberculosis revealed that 35 patients were initially diagnosed as pancreatic cancer. There were even cases in which Whipple procedure was applied to these pancreatic masses on the assumption of pancreatic cancer, in whom tuberculosis was consequently diagnosed (5). The diagnosis is as challenging in the intraoperative and postoperative periods as in the preoperative period. Caseating granuloma is seen in 75-100% of cases, and acid-fast bacilli are identified in 20-40% of cases. Even when an intraoperative specimen is sent for direct smear and culture, results are positive in approximately 77% of cases (6-8). We present here a case of pancreatic and peripancreatic tuberculosis, with peritoneal dissemination mimicking peritonitis carcinomatosa, which was treated with cholecystostomy and medical treatment.

A 79-year-old female presented with a two-week history of right abdominal hypochondriac pain, fatigue and high fever, and a weight loss of 5 kg in one month. According to her medical history, she had no particular medical or surgical history or family history of tuberculosis, and no immunosuppressive disease such as human immunodeficiency virus. She never consumed alcohol. Abdominal examination showed right upper hypochondriac sensitivity with no hepatosplenomegaly or ascites, and no mass was observed on palpation. Her laboratory investigations were as follows: white blood cells (WBC) 7.5 U/L (reference range: 4.3-10.3), to-

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