Mesenteric Phlebosclerosis: an Unexpected Cause of Abdominal Pain

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A 60-year-old woman presented to the emergency department with a history of lower abdominal pain, vomiting and fatigue for 3 weeks. She had used Chinese herb medicine for 10 years subsequently causing nephropathy and had been on maintenance hemodialysis for 1 year. Physical examinations revealed the distended abdomen with tenderness in the right lower quadrant. Laboratory tests: leukocyte, 8560 /mm³, hemoglobin, 9.7 g/dL; creatinine, 11.3 mg/dL; serum urea, 52 mg/dL; C-reactive protein, 11.3 mg/dL. The other laboratory data was unremarkable. Plain abdominal radiograph revealed linear calcifications along the right hemicolon and proximal transverse colon (Fig. 1).

Computed tomography (CT) of the abdomen disclosed marked thickening of the right hemicolon (arrow) and diffuse thread-like calcifications along the colonic wall and in the mesenteric vein (Fig. 2). Reformatted coronal maximum intensity projection images better depicted comb-like calcifications in the mesenteric vein (Fig. 2B). Colonoscopy demonstrated dark blue edematous mucosa with erosions in the corresponding portion (Fig. 3). Histological examination revealed marked fibrotic sclerosis of the veins in the submucosal layer and the deposition of collagen around blood vessels in the mucosa. All these characteristic findings suggested idiopathic mesenteric phlebosclerosis (IMP).

Proposed by Iwashita et al in 2003, IMP is a rare disease entity causing ischemic colitis [1]. Although the etiology and pathogenesis remain unclear, certain toxins or biochemicals, via absorption to the venous return, may play an important role in IMP [2]. Most of the reported cases occur in patients of Asian background with long-term use of Chinese herbal medicine. The ascending colon and cecum are more affected. Symptoms of IMP may resolve spontaneously. Plain abdominal radiograph and CT scanning can demonstrate the characteristic imaging features of IMP and avoid the need for more aggressive diagnostic and therapeutic procedures, such as angiography or surgery [3]. Surgery might be required only when patients present with aggravating abdominal obstructive symptoms.

References