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Dear Editor,

We would like to submit the enclosed manuscript for possible publication in the "Image of the month" section of Clinical Gastroenterology and Hepatology. The manuscript is entitled "Primary Linitis Plastica of the Sigmoid Colon". This case is an unusual form of colon cancer. We presented the typical image findings including the CT, EUS, Sonography and Colonoscopy for this rare disorder.

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Thank you very much for your kind attention. If you have any questions regarding this manuscript, please do not hesitate to contact us by mail at our correspondence address, by fax at (886)-4-7228289, by telephone at (886)-4-7238595ext5501, or by email at 91646@cch.org.tw

Sincerely,

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Primary Linitis Plastica of the Sigmoid Colon

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A 60-year-old man received a screening colonoscopy for a positive stool occult blood testing. He reported to have small caliber of the stool in the past 3 months. His medical history was unremarkable. On colonoscopy, the colonic lumen is markedly narrowed with ulcerated and hyperemic mucosa found in the sigmoid colon (Figure 1, video1). A miniprobe ultrasound (SP-702 ; Fujinon) revealed diffusely thickening of the colonic lumen, little ascites and destruction of the five layers structure (Figure2, video 2). An abdominal ultrasound revealed long segmental bowel thickening over the sigmoid colon (video 3). Abdominal CT showed symmetric thickening of the sigmoid colon (Figure 3, arrows). A biopsy from the colonoscopy revealed adenocarcinoma and a diagnosis of primary linitis plastica of the sigmoid colon was made. Surgical resection was performed. The resected colon had a narrowed lumen with diffusely thickened wall (Figure 4). Pathological examination revealed poorly differentiated adenocarcinoma infiltrating the entire colonic wall (Figure 5). The patient was referred to oncology clinic for further chemotherapy.

Linitis plastica refers to scirrhous carcinoma with diffuse thickening and hardening of the bowel wall¹. The reported prevalence ranges from 0.2% to 0.09% among the colonic malignancy^{2,3}. Secondary linitis plastica of the colon can originate from the gallbladder, prostate or breast and is more common than the primary form^{2,3}. The sigmoid colon and rectum are the most common sites of primary linitis plastica of the colon. Rare case involving the entire colon had been reported³. A differential diagnosis of the image studies includes lymphoma, Crohn's disease and tuberculosis^{2,3}. The diagnosis of linitis plastica of the colon is usually delayed because of its submucosal spread and the prognosis is usually poor.

Figure Legends:

Figure 1 and Video 1

Colonoscopy revealed a marked narrowed lumen of the sigmoid colon with ulcerated and hyperemic mucosa.

Figure 2 and Video 2

Minoprobe ultrasound (SP-702 ; Fujinon) revealed diffusely thickening of the bowel wall with destruction of the five layers structure.

Video 3.

Abdominal ultrasound revealed long segmental bowel thickening over the sigmoid colon.

Figure 3.

Abdominal CT showed symmetric thickening of the sigmoid colon (arrows).

Figure 4.

Photography of the resected segment of colon showing diffuse thickening of the bowel wall.

Figure 5.

The entire colon wall was infiltrated with poorly differentiated adenocarcinoma cells with eccentric nuclei and abundant cytoplasm. (original magnification: H&E stain, 400X)

Disclosure:

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