

Colonic telangiectasias in progressive systemic sclerosis

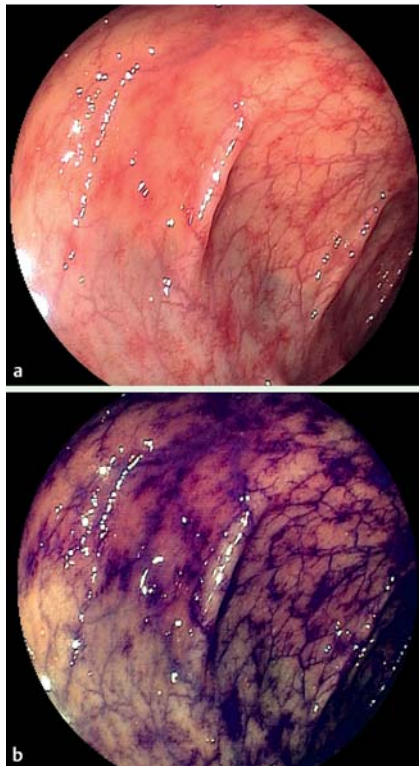


Fig. 1 The left hemicolon: **a** white light endoscopic image showing the dense reticular network and multiple telangiectasias; **b** visualization of the dense reticular network and the multiple telangiectasias using Fuji Intelligent Color Enhancement (FICE).

A 61-year old woman was referred for analysis of iron-deficiency anemia and intermittent rectal blood loss. At age 35 she had been diagnosed with progressive systemic sclerosis, based on the presence of cutaneous telangiectasias, scleroderma, and pulmonary hypertension.

Esophagogastroduodenoscopy revealed no abnormalities; in particular, no gastric antral vascular ectasia was observed. At colonoscopy, the colon appeared atonic. A dense reticular vascular pattern was observed throughout the colon, and multiple telangiectasias were observed (Fig. 1 a). With spectral endoscopic image processing using Fuji Intelligent Color Enhancement (FICE) (Fujinon Corporation, Saitama, Japan) – setting 4 (red 500 nm, green 480 nm, blue 420 nm) – the vascular pattern was enhanced, enabling better en-

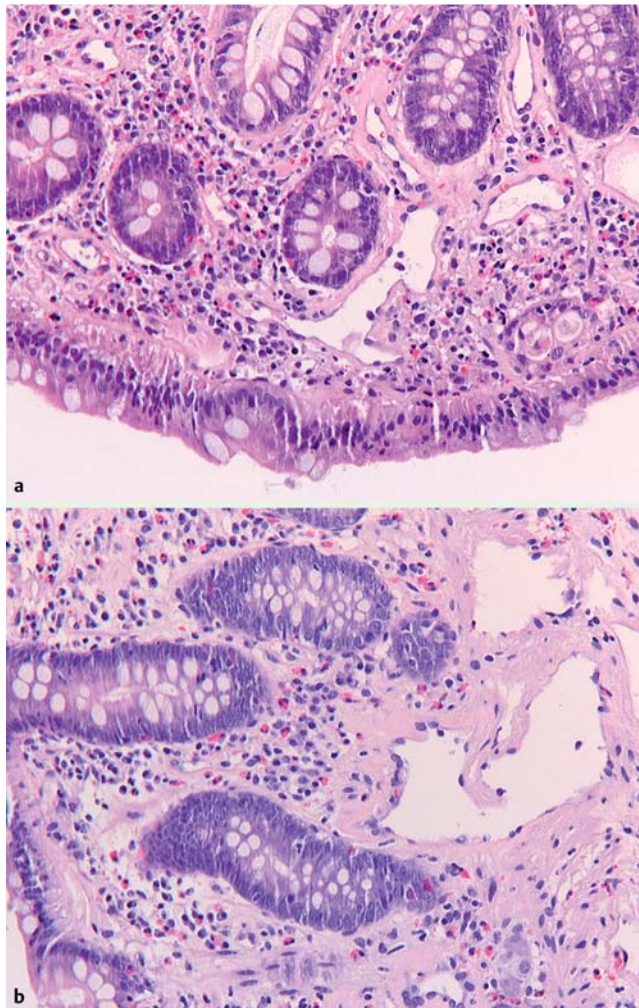


Fig. 2 Colonic biopsies showing dilated telangiectatic vessels that are **a** superficial and **b** deep in the lamina propria, extending into the muscularis mucosae. The vessels have a normal flat endothelium. There was a slight increase in inflammatory cells in the lamina propria with prominent eosinophils.

doscopic evaluation of the complex vascular pattern and the extent of the diffuse vascular abnormalities (Fig. 1 b). Biopsy specimens of superficial telangiectasia revealed an increase in the number of capillaries – both superficial and deep in the lamina propria (Fig. 2).

Because of the diffuse nature of the telangiectasias, no endoscopic therapy was performed. With low frequency intravenous iron therapy, the anemia gradually resolved. After the introduction of mild laxatives, no further rectal blood loss occurred.

Gastrointestinal bleeding occurs in approximately 15% of all patients with progressive systemic sclerosis [1]. The most common cause is mucosal telangiectasias, which can occur throughout the entire gastrointestinal tract [2]. In the stomach,

these lesions often appear as antral vascular convolutes, converging at the pylorus (gastric antral vascular ectasia, GAVE) [3]. Colonic telangiectasias have been reported far less frequently than those in the stomach, and usually as isolated lesions only [1,3].

Several endoscopic therapies have been described, including bipolar coagulation and argon plasma coagulation [1]. In our patient, the telangiectasias were so extensive that endoscopic therapy was not considered useful. It is known that spectral endoscopic image processing can enhance the visualization of gastrointestinal vascular ectasias [4,5]. In our patient, spectral endoscopic image processing facilitated better appreciation of the extent of the vascular abnormalities.

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Competing interests: None

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