A 70-year-old woman was referred to our hospital for treatment of a laterally-spreading tumor (LST) of 40mm diameter, located in the ascending colon. The woman also had chronic renal failure.

Before endoscopic treatment, magnifying endoscopy and endoscopic ultrasound (EUS) was scheduled to allow a more precise diagnosis.

Initially, chromoendoscopy with indigocarmine, magnifying endoscopy with crystal violet were performed with air insufflation. During the procedure bright-red, linear markings appeared in the ascending colon (Fig. 1 A, B), and the colonic movement became hyperperistaltic. Therefore, the colonoscope was withdrawn immediately and the scheduled EUS was cancelled. The time duration of the observation was 15 minutes.

After three weeks, endoscopic submucosal dissection (ESD) for the LST was performed with carbon dioxide insufflation. The LST was successfully removed en bloc. The time duration for the procedure was 60 minutes and cat scratch lesions were not observed throughout the procedure (Fig. 2).

Cat scratch colon was first described by McDonnell [1]. Cat scratch colon is a rare condition that occurs spontaneously or partially associated with collagenous colitis, where bright-red linear markings appear, mostly on the normal mucosa [1]. Cat scratch colon arising either spontaneously, in the ascending colon, or in diversion colitis, is presumed to be a benign condition secondary to barotraumas, induced by excessive air insufflation during colonoscopy [2-4].

Recently, colonic perforation due to high air pressure was reported, following observation of a cat scratch colon [3]. However, carbon dioxide was rapidly absorbed and was safe during colonoscopy [5]. Because cat scratch colon was not observed during the ESD, with carbon dioxide insufflation, the use of carbon dioxide might have reduced the high pressure that could have lead to perforation.

We believe that a large volume of air entering the lumen of the colon during colonoscopy caused this cat scratch colon in the present case.

References