A 51-year-old female was referred to our hospital for asymptomatic multiple cystic lesions detected during screening colonoscopy. The patient had no history of pulmonary disease, peptic ulcers, or connective tissue disease. Colonovideoscopy (CVS) examination revealed 3–20 mm sized multiple cystic lesions with an overlying normal mucosal layer in the ascending colon (Figure 1). The patient subsequently underwent computed tomography (CT) colonography (CTC) in order to evaluate the colonic wall and extracolonic compartments. The CTC images are shown as an endoscopic view and a 3D reconstruction in Figure 2 and Figure 3, respectively. Microscopy examination revealed air-containing cysts and mild inflammation in the submucosal layer (Figure 4). Based on CVS, CTC, and pathology findings, pneumatosis cystoides coli (PCC) of the ascending colon was diagnosed. As the patient was asymptomatic, treatment consisted of detailed follow-up examinations without medical treatment. The cysts were no longer detectable on CVS and CTC performed 17 months later, indicating that spontaneous resolution had occurred (Figure 5 and 6).

PCC is a rare disease characterized by the presence of multiple gas-filled cysts in the bowel wall [1]. CVS findings of PCC are multiple polypoid lesions covered by normal-appearing mucosa. Puncture, leading to complete deflation, is helpful in the diagnosis of PCC [2]. In general, the diagnosis of PCC can be established using CT scans showing intraluminal gas forma-
tions parallel to the bowel wall [3]. CT scans can also detect bowel changes and their associated conditions. Recently, the usefulness of CTC in PCC diagnosis was reported [4,5]. CTC can provide a more precise assessment of the extent and severity of PCC than conventional CT. Furthermore, better image quality means CTC improves the chances of detecting complications or underlying diseases, which is important for determining appropriate treatment and prognosis.

References


Figure 6 Spontaneous cyst resolution. Air-containing cysts are no longer apparent on computed tomography colonography 3D reconstruction images, taken 17 months after initial cyst detection.

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