A 73-year-old woman presented with a 10-year history of abdominal pain. Computed tomography showed swollen soft tissue in the ileocecal area. Colonoscopy showed a submucosal bulge in the ileocecal area (suspected lipoma) (Fig. 1). After completing relevant examinations, colonoscopy was repeated (Video 1) and showed a 2 cm × 3 cm submucosal bulge, with smooth mucosa at the ileocecal junction and pus at the appendiceal orifice (Fig. 2). After aspirating the pus, an incarcerated fecal stone was observed at the appendiceal orifice (Fig. 3). The appendicolith was extracted using a retrieval basket (Fig. 4). The appendiceal lumen showed apparent mucosal hyperemia, swelling, and local erosion (Fig. 4). The patient’s abdominal pain subsided after the operation and she was discharged a week later.

In this case, we observed the appendiceal lumen using an appendoscope and administered the necessary treatment based on endoscopic retrograde appendicitis therapy. We successfully developed a special endoscope, which has received ethical approval and has undergone clinical trials; this was the first clinical application. The appendoscope is a disposable digital system that operates...
through the colonoscope clamp channel and incorporates an LED light source (Fig. 5). The outer sheath tube diameter is 3.3 mm or 2.6 mm. It has one clamp channel (diameter 2.0 mm or 1.2 mm), two flushing channels, and the head end of the outer sheath can be adjusted in multiple directions. The appendoscope can avoid the harm of intraoperative radiographic fluoroscopy to patients and operators. Compared with the SpyGlass DS (Boston Scientific, Marlborough, Massachusetts, USA), the appendoscope has a more stable imaging system and a significant price advantage (USD500 vs. USD3000 for SpyGlass). We are currently developing special biopsy forceps, stents, and other accessories. This appendoscope is expected to become an important tool for the diagnosis and treatment of appendiceal diseases.

**Competing interests**

The authors declare that they have no conflict of interest.

**The authors**

Shujiong Feng, Kai Ling, Ting Zhang, Xiaofeng Zhang, Xiaojun Yan, Jin Yang, Yifeng Zhou

Department of Gastroenterology, Affiliated Hangzhou First People’s Hospital, Zhejiang University School of Medicine, Hangzhou, Zhejiang 310012, China

Corresponding author

Yifeng Zhou, MD

Department of Gastroenterology, Affiliated Hangzhou First People’s Hospital, Zhejiang University School of Medicine, Hangzhou, Zhejiang 310012, China

17415360@qq.com

**Bibliography**

Endoscopy 2022; 54: E296–E297

DOI 10.1055/a-1519-6903

ISSN 0013-726X

published online 2.7.2021
© 2021. Thieme. All rights reserved.

Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany

Endoscopy E-Videos is an open access online section, reporting on interesting cases and new techniques in gastrointestinal endoscopy. All papers include a high quality video and all contributions are freely accessible online. Processing charges apply (currently EUR 375), discounts and waivers acc. to HINARI are available.

This section has its own submission website at https://mc.manuscriptcentral.com/e-videos