A case of complete colorectal anastomotic obstruction treated by fully covered metal stents of gradually increasing diameter

Benign colorectal postoperative stricture occurs in 5%–20% of cases of sigmoid resection or rectal anterior resection and often involves the distal extraperitoneal rectum. Anastomotic ischemia seems to play an important role. Surgical management with a “re-do” anastomosis was considered the standard treatment in previous years. Nowadays, balloon dilation is considered the gold standard for the treatment of anastomotic strictures, but the treatment often results in a re-stenosis [1]. A limited amount of data have been published in the literature about the use of fully covered metal stents (FCSEMs) for the treatment of anastomotic refractory fibrotic strictures, but no data showing the effectiveness of gradually increasing the diameter of the FCSEMs in the treatment of these patients has ever been published.

We describe the case of a 68-year-old man who had undergone Hartmann sigmoid resection and successive recanalization. After a few months, there was evidence of complete closure of the colorectal anastomosis with a lumen of just 2 mm in diameter (▶ Video 1). As a first step, the patient underwent placement of a 16×30-mm pseudocyst FCSEM (Nagi; Taewoong Medical Co., Seoul, South Korea). After 50 days, this FCSEM was changed to an enteral through-the-scope 22–30×80-mm FCSEM (Taewoong Medical Co.). About 2 months later, an over-the-wire 24–32×100-mm FCSEM (Taewoong Medical Co.) was substituted for the second stent. After 30 days, the third stent was removed and a lower gastrointestinal endoscopy showed complete resolution of the stricture (▶ Video 1). This treatment using FCSEMs of gradually increasing diameter, in expert hands, is a safe and efficacious strategy for the treatment of the benign colorectal anastomosis.