

Self-expandable metallic stent as a rescue therapy in stenotic Crohn's Disease

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Dear Editor,

Ileocolonic anastomosis strictures are common complication in patients with Crohn's disease (CD) after surgery (1,2). For short strictures, endoscopic balloon dilation (BD) is effective, but recurrence is frequent and requires further dilations or surgery and occurs with associated complications, such as perforation and bleeding (3-5). Consecutive surgery carries the risk of short bowel syndrome. Also, anastomotic leaks and fistulas are common in patients with CD who undergo surgery (3-5).

A 40-year-old man with a history of CD was referred to our hospital with abdominal pain, nausea, and vomiting. He had an ileocecal resection 10 years ago. Also, 5 years ago, the patient was diagnosed with cryptogenic cirrhosis. The patient did not consume azathioprine appropriately due to portal hypertension-related severe leucopenia. During the past year, he was admitted to our clinic with the symptoms of subileus; BD was attempted five times, but symptoms relief was not achieved completely. Large esophageal varices were observed in an upper gastrointestinal system endoscopy. On admission, white blood cell count was 1,800/ μ L (neutrophil count was 1.200/ μ L), platelet count was 59,000/ μ L, and C-reactive protein level was 10.5 (0-5). Albumin was 2.9 g/dL, and the other biochemical parameters were within normal limits. On abdominal X-ray, air-fluid levels were observed. On computed tomography, 3-cm long strictures were observed at the site of ileocolonic anastomosis (Figure 1), and severe stenosis was observed endoscopically in the ileocolonic anastomotic region (Figure 2).

Due to the presence of Child B cirrhosis and severe portal hypertension, both surgeon and patient were reluctant for re-surgery. On colonoscopy, the stenotic anastomosis

site was reached again. A standard ERCP guide wire was directed to the proximal site of the stenosis. A through the scope (TTS) uncovered colonic self-expandable metallic stent (U-SEMS) (60x26x20 mm Niti-S D type, Taewoong Inc.; Seoul, Korea) was placed through the stricture under endoscopic and fluoroscopic guidance. The stent was found functional on passage graphy that was performed the day after. With these findings, anti-tumor necrosis factor (TNF) agent was initiated. For 6 months, the patient had no symptoms attributable to stenosis. Unfortunately, at the end of 6 months, the patient presented again with obstructive symptoms due to tissue ingrowth of U-SEMS. A second TTS partially covered colonic SEMS (PC-SEMS) (20x100 mm, Niti-S COMVI, Taewoong Inc.; Seoul, Korea) was placed within the first stent (Figure 3). At 1 year after second stent placement, patient continues to be symptom free.

Here, we presented the first case according to literature wherein colonic SEMS was inserted for stenotic CD instead of re-surgery because of concomitant Child B cirrhosis and severe portal hypertension. The most important complication of fully covered colonic SEMS (FC-SEMS) in CD is migration and perforation with the need of urgent surgery; for this reason we preferred U-SEMS at first (1). In literature, there has been a report of a patient with stenotic CD with symptom free survival for 9 years after the placement of U-SEMS (5). However, we had to insert a second PC-SEMS into the first stent due to tissue ingrowth that is the most frequent complication of U-SEMS (1). Overall, our patient has been surviving without the need of re-surgery since 18 months. The association of primary sclerosing cholangitis and CD is a well-known condition. Therefore, a scenario similar to our patient may be encountered for other patients. SEMS can be a permanent treatment for these patients, allowing to

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Figure 1. On computer tomography, 3-cm long strictures were observed at the site of ileocolonic anastomosis (arrow). Also, liver atrophy and nodularities are observed in this image



Figure 2. Severe stenosis is observed endoscopically in the ileocolonic anastomotic region

gain time for alternative therapies, such as full response to anti-TNF treatment or liver transplantation and intestinal surgery.



Figure 3. A second TTS PC-SEMS is placed within the first U-SEMS (U-SEMS distal borders are labelled with white arrows, and distal part of the second stent is labelled with black arrows)

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