Colonic obstruction due to infiltrative sigmoid endometriosis - laparoscopic rectosigmoid resection after colonic stenting

Severin Gloor¹, Sina Schmidt¹, Ralph Stärkle³, Res Jost², Stefan Breitenstein¹

¹Department of Visceral and Thoracic Surgery, Kantonsspital Winterthur, Switzerland and ²Department of Gastroenterology, Kantonsspital Winterthur, Switzerland

Introduction
Endometriosis is an enigmatic disease affecting about 6-10% of reproductive-aged women [1]. In 3-37% of all cases endometriosis affects the bowel [2], mostly the sigmoid colon and the rectum [3]. Because medical therapy has been found to be ineffective [4], surgical resection is often the only treatment option.

Case report
Anamnesis
A 38-year-old woman presented to the emergency department and complained of a distended abdomen, constipation, and relapsing abdominal pain in a two-week period. Because of secondary infertility and expected endometriosis, the patient had a diagnostic laparoscopy with peritoneal biopsy 19 months prior to admission. The diagnosis of endometriosis was confirmed and involvement of the sigmoid colon was already suspected. Subsequently, the patient took a hormonal therapy for down-regulation.

Status
Highly distended abdomen, hypersonorous percussion sound, diffuse tenderness on palpation, no peritonism.

Findings
The computer tomography showed a tumour adherent to the uterus measuring 4.5 x 3.5 x 2.0 cm with external compression of the sigmoid colon, leading to a large bowel obstruction.

Therapy
General sanctions
An antibiotic therapy with cefepime and metronidazole was installed. Additionally, a stomach tube was inserted to reduce the prestenotic bowel pressure.

To possibly avoid a stoma and an open surgical approach, we planned a colonic stent insertion as bridge to surgery.

Endoscopic insertion of wallstent-endoprothesis
An incomplete stenosis was seen endoscopically in the sigmoid colon with prestenotic dilatation of the colon. The mucosa was polypoid, but not inflamed. An uncovered colonic stent was successfully placed in an ideal position. After the stent insertion, the patient recovered quickly from the colonic obstruction.

Surgical treatment
The patient underwent laparoscopic rectosigmoid resection with primary anastomosis five days after stent insertion. The patient was treated with the ERAS-concept (Enhanced Recovery After Surgery). The postoperative course was uneventful and the discharge from hospital was 5 days after surgery. The histo-pathological report confirmed extended colonic infiltration of endometriosis into the sigmoid colon.

Conclusion
- Complete large bowel obstruction due to endometriosis is very rare.
- Surgical treatment is needed in most cases and a laparoscopic approach is preferred.
- A two-stage procedure with stenting as bridge to surgery and secondary laparoscopic resection is feasible. Subsequently, it may be preferable to lower the perioperative morbidity and mortality.

References