Endometriosis or adenomyosis is a commonly occurring gynecological pathology, which consists in the presence of ectopic endometrial implants outside the normal uterine mucous membrane (1). The pathogenesis of the disorder remains to be established. The cause believed to be most probable is called retrograde menstruation, that is retrograde blood flow through the fallopian tubes and implantation of endometrial cells in the peritoneum (2). Ectopy of endometrial cells usually concerns other than the uterus, reproductive system organs (ovaries, fallopian tubes, uterine cervix). In 3-37% of patients with diagnosed endometriosis the gastrointestinal tract is included (3). The intestinal location of endometriosis is as follows: sigmoid and rectum (72%), small bowel (7%), cecum (4%), and appendix (3%) (4, 5, 6). Intestinal obstruction is most often caused by external tumor infiltration. Less likely, the tumor grows into the intestinal lumen (7).

Considering clinical practice gastrointestinal tract endometriosis leading towards intestinal obstruction is rarely diagnosed. The study presented a case of the above-mentioned diagnosed in our department.

CASE REPORT

A 32-year old female patient was admitted to the department of general surgery, due to diffuse, colic type, abdominal pain. The patient complained of retention of gas and stool lasting for the past three days, accompanied by abdominal pain and vomiting on the day of admission.

The patient, previously healthy, in 2003 underwent a cesarean section, which was the only surgical intervention in her life.

After a thorough medical history gathering, it turned out that the first episode of abdominal pain and retention of gas and stool occurred one month earlier. The patient was subject to initial ER diagnosis (abdominal ultrasound, gynecological consultation), which showed no significant abnormalities. Abdominal pain and obstruction symptoms resolved after the administration of spasmolytic drugs, until the
second obstruction episode, which resulted in the current hospitalization.

Diagnostic and therapeutic management

On admission, the patient was in good general condition, without fever. The physical examination of the abdominal cavity showed hypertonia of the integuments with marked peritoneal symptoms. The abdomen was sensitive on palpation with palpable intestinal loops. Intestinal peristalsis was present with signs of obstruction. The per rectum examination revealed the presence of normal stool, without palpable lesions. Rectal bleeding was not observed. The abdominal X-ray showed distended intestinal loops with fluid levels.

The consecutive abdominal ultrasound examination showed the presence of fluid in the peritoneal cavity, located in the hypogastrium, interloop, and surrounding the spleen. Laboratory results showed hypokalemia (3 mmol/l), hipoalbuminemia (4.2 g%), and increased urine amylase level (707 IU/l). The morphology was as follows: WBC – 8.1 ths./µl, RBC – 4.65 mln/µl, Hgb – 14.2 g%, HCT – 42.9%, PLT – 130 ths./µl.

Immediately after admission to the hospital conservative therapy was initiated. The patient was subject to a strict diet, intravenous fluids, gastric tube insertion, and enema recommendation. As a result of the above-mentioned therapy symptoms diminished, although did not disappear completely. The patient continued to complain of gas and stool retention. Abdominal CT was performed showing a thickened uterine endometrium and cervix.

Additionally, we observed the presence of a tumor 35x29 mm in size, located in the body of the uterus, subject to intensified contrast enhancement. The distal segment of the sigmoid (3 cm) was location to the width of the lumen amounting to 4mm. The intestinal walls were thickened. Emergency colonoscopy revealed the presence of an infiltration constricting the intestinal lumen located in the recto-sigmoid curvature. The patient was qualified for surgery.

The peritoneal cavity was opened by means of the medial incision. We observed the presence of a rectal tumor infiltrating the uterus. The remaining abdominal cavity organs were free of pathology. We were able to prepare the solid tumor from the uterus, and excise a fragment of the rectum and sigmoid with a 5 cm margin of healthy tissues. Gastrointestinal continuity restoration was restored by means a circular stapler, anastomosing the rectal stump and sigmoid (end-to-side anastomosis). Due to massive intestinal loop distention decompressive jejunostomy was performed, 50 cm above the ileocecal valve. The excised tissue sample was subject to histopathological evaluation. The postoperative course proved uneventful. The patient was discharged from the hospital in good general condition on the eight day after the operation. The histopathological result revealed the presence of endometriosis.

After two months the patient was admitted to the hospital for gastrointestinal tract continuity restoration. Elective surgery was performed, the peritoneal cavity was opened. Intestinal loops were freed from adhesions. The patient was subject to segmental resection of the small bowel followed by end-to-end anastomosis by means of a stapler. The postoperative course was uneventful. The patient was discharged from the hospital on the seventh postoperative day in good general condition.

DISCUSSION

Endometriosis concerns 7-50% of menstruating female patients. The pathogenesis of endometriosis remains unclear. Most of the lesions are located in the small pelvis, ovaries, Douglas’s sinus, uterosacral ligaments, and broad ligament of the uterus. Sometimes endometriosis is diagnosed in scars after laparotomy in the gastrointestinal tract, urinary tract, breast, skeletal system, and diaphragm (1, 3). In case of gastrointestinal tract location the above-mentioned lesions may be found in the anterior rectal wall and vicinity of the rectouterine pouch (8, 9). The most common image of gastrointestinal endometriosis is the presence of a solid mass located outside the intestinal lumen, infiltrations constricting the intestinal lumen, or polyp-like tumor growing inside the intestinal lumen (10).

In case of the presented patient the lesion was located in the rectum, outside the colon, infiltrating the uterus and leading towards low gastrointestinal tract obstruction.
Rectal endometriosis – rare case of intestinal obstruction

Gastrointestinal endometriosis symptoms include diffuse abdominal and rectal pain, which intensify during menstruation (11). The above-mentioned are accompanied by painful periods and heavy menstrual bleeding (11, 12). Other symptoms include diarrhea, constipation, rectal bleeding, pencil-like stool, and large bowel obstruction or abdominal tumor presence (12, 13), less frequently - small bowel obstruction (14). The study patient complained of colic, abdominal pain, and gas and stool retention, despite conservative treatment. The patient menstruated regularly, and abdominal pain did not intensify during menstruation.

Until the appearance of gastrointestinal obstruction symptoms regular bowel movements were observed. Rectal bleeding was not present.

When suspecting endometriosis the patient is subject to diagnostic methods, such as laparoscopy and biopsy of the lesion. Diagnosis is established after histopathological sample evaluation. Considering the presented study patient the initial diagnostic examinations were aimed at determining the cause of the ‘acute abdomen’: abdominal cavity X-ray and ultrasound. Another examination that enabled better diagnosis was contrast-enhanced abdominal CT, which showed the presence of a colon pathology, suggesting neoplastic disease.

The above-mentioned examinations were found to be sufficient when deciding on surgery.

The patient was subject to typical surgical management, as used in case of intestinal obstruction caused by a tumor. The tumor was excised with oncological margins, followed by primary rectosigmoid anastomosis and decompressive jejunostomy. Gastrointestinal tract continuity was restored two months after the primary operation.

In case of intestinal endometriosis, similarly to neoplastic lesions, the recommended method of treatment consists in the resection of the lesion with primary anastomosis and sigmoido- or transversostomy (10, 15). Nowadays, more often than in the past, sigmoid and rectal resections are performed by means of laparoscopy (7). It seems important to remove all endometriosis tissues “en block”. At the same time it is appropriate to completely excise the intestinal lesion, due to the possibility of tumor growth (15).

In conclusion, apart from the young age of the patient, nothing else pointed to the expected cancerous cause of colon obstruction. The patient did not complain of menstrual disorders, menstrual pain, nor periodic gastrointestinal bleeding. The histopathological result of the excised tumor was a pleasant surprise, both for the surgeon and patient.

REFERENCES