ORIGINAL ARTICLES

# Endometrial adenocarcinoma presented with enterouterine fistula

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**Summary**

Presentation of endometrial adenocarcinoma with an ileouterine fistula as an initial symptom is exceptionally rare. Besides a report on such case we give a brief review of the literature on this subject.

The case is a 77-year-old woman with an ileouterine fistula caused by endometrial adenocarcinoma. The uterus and the small bowel were removed en bloc followed by colostomy. The patient was referred for radiation therapy to be followed with six cycles of carboplatin and 5FU.

*Key words:* Endometrial adenocarcinoma; Enterouterine fistula.

## Introduction

This is a case of a patient presenting with an ileouterine fistula as an initial symptom of endometrial adenocarcinoma. It is a very rare complication of pelvic tumors. The vast majority of the fistulas described have been associated with inflammatory bowel disease, obstetric trauma, uterine perforation during curretting or intrauterine device placement [1, 2]. In our case, the most likely etiology is direct tumor infiltration.

## Case history

A 77-year-old Caucasian woman, gravida 4, para 4, was admitted through the Emergency Room due to recent onset of passing feces from her vagina. Physical examination revealed abdominal tenderness and a soft abdominal mass. At pelvic exam, feces were coming from the cervical os. Subsequently, her rectal and I.V. contrast CT scan revealed an enlarged uterus (20 x 20 cm) with an irregular intramural mass. Small bowel loops were opening into the endometrial cavity. These findings were consistent with a small bowel-uterine fistula (Figure 1). The patient had symptoms including pelvic pain and cramping in the pelvis for six months but did not seek medical help until she started to pass feces from the vagina.

The patient required total abdominal hysterectomy, bilateral salpingo-oophorectomy, pelvic paraaortic lymphadenectomy, omentectomy with peritoneal irrigation, small bowel resection. Surgery revealed that the tumor was located in the uterine corpus with perforation of the posterior wall and fistula formation with three loops of small bowel to the endometrial cavity (Figure 2). The tumor extended to the rectosigmoid and cervix with metastasis to the left ovary and small bowel. Following the hysterectomy, ileum to transverse colon anastomoses was performed. A descending colostomy was created along with en bloc rectum resection with the uterus.

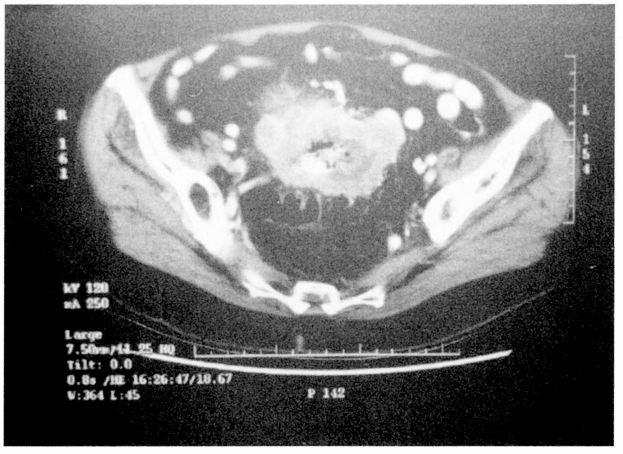


Figure 1. — Pelvic CT Scan. Hypo- and hyperechoic areas consistent with segments of bowel embedded in the endometrial cavity.

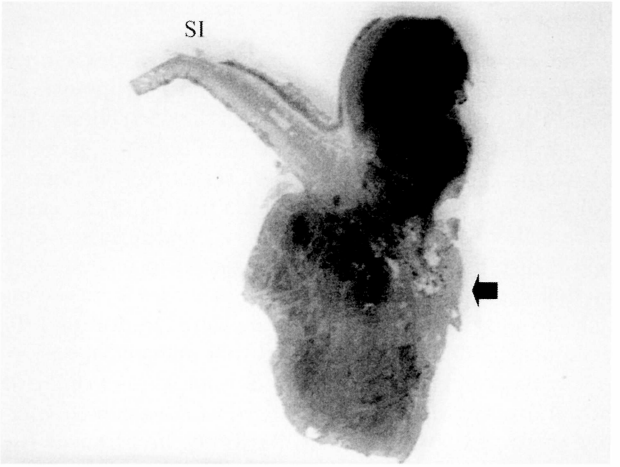


Figure 2. — Full thickness sections of small intestine (SI) with endometrial tumor (T) invasion. The arrow indicates areas of necrosis along the fistulous tract (x 2.5).

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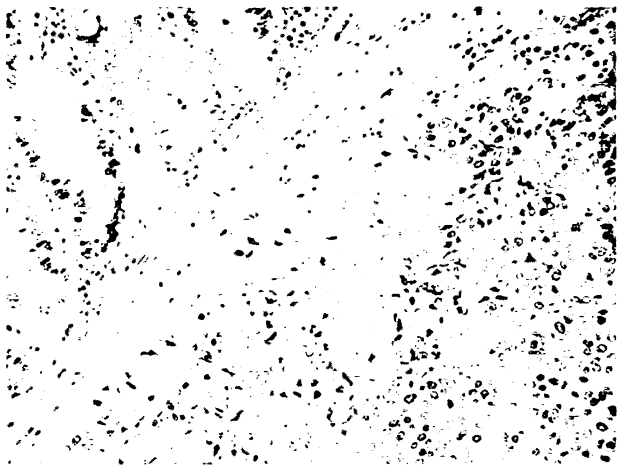

Figure 3. — Low power field showing small intestinal mucosa (left upper corner) and endometrial tumor (right lower corner) (x 40).

The permanent sections of the specimen showed a uterus with Grade 3 endometrioid adenocarcinoma through the entire myometrium with a fistula formation between the uterine corpus and small bowel (Figure 3). Pelvic washing was positive for malignancy. The adenocarcinoma extended to the endo- and ectocervix, rectosigmoid serosa, small bowel serosa with focal infiltration of colonic mucosa. Left ovary and parametrial involvement were also noticed. One out of 32 lymph nodes was positive for metastatic adenocarcinoma. Architecturally the tumor consisted of both glandular and solid areas with large areas of necrosis. Solid elements comprised more than 50% of the tumor and the metastatic component was solely solid. Glands were irregular with cribriform patterns and nuclear palisading. The solid areas consisted of sheets of cells with moderate nuclear pleomorphism, occasional large bizzare nuclei, prominent nucleoli, individual cell necrosis, numerous mitoses, with a small focus having clear cell features, and focal calcifications.

The patient had an uneventful postoperative course of stay in the hospital and was discharged on postop day 8. She was referred for radiation therapy to be followed with six cycles of carboplatin and 5FU.

## Discussion

The current literature is very limited in describing communication between the uterus and gastrointestinal tract. The first case was described in the 16th century. Up to now less than 100 cases have been reported [1, 3, 4, 5]. Martin *et al.*, with an 80-patient series, has the highest volume on this topic. They reported that 42 of the cases were followed by obstetric injury, 17 had inflammatory bowel disorders, and 12 had a recent history of surgery including criminal abortion. Only nine cases were secondary to pelvic carcinoma which were predominantly endometrial. Our patient had had four uneventful deliveries without episiotomy cuts, and no previous history of bowel disorder. In this case, the most reasonable explanation for the fistula would be direct invasion of the tumor. This is a rather unusual initial presentation of endometrial carcinoma because the majority of endometrial carcinomas present with vaginal bleeding. When a woman over 70 years old presents with vaginal bleeding, her chances of having cancer are about 50% [6]. Cancer of the endometrium is the most common malignancy seen in the female pelvis. Over the last several years, the incidence has remained fairly constant while deaths from uterine cancer have slightly increased. That makes an early diagnosis extremely critical. Therefore women over 40 years of age with vaginal bleeding need endometrial sampling to rule out cancer. Yet, as it happened in our case, a high index of suspicion must be maintained if the diagnosis of endometrial cancer is to be made in cases with unusual presentations. Rapid developments in imaging techniques make the diagnosis easier in clinically suspected patients [3, 7, 8]. Radiation therapy has been suggested as a new possible etiologic factor to which our patient was not exposed [9]. Finally, an enterouterine fistula is the rarest among the pelvic fistula types [10].

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