Case Report

Uterocutaneous fistula after myomectomy: An unusual complication

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Abstract

Abdominal myomectomy is still considered as a good choice for women with a huge fibroid who need to maintain their reproductive function. Uterocutaneous fistula is a rarely seen complication of myomectomy procedure. In the present case, we introduced a patient who presented with uterocutaneous fistula after myomectomy procedure. A 32-year-old women presented with the complaint of pelvic pain and bulk symptoms. Her transabdominal ultrasonography revealed a giant subserosal leiomyoma and abdominal myomectomy was performed. On the 20th postoperative day, the patient presented again with hemorrhagic discharge through an opening on the abdominal incision. CT clearly demonstrated a fistula tract. The patient underwent explorative laparotomy, fistulectomy and primary repair of myometrium and discharged on the 6th postoperative day. The patient had no complaints on the third postoperative months and experiences regular menstrual cycles. Treatment with fistulectomy without hysterectomy and intravenous large spectrum antibiotics have a favorable prognosis.

Key Words:
Complication; fistula; fistulectomy; leiomyoma

Introduction

Uterine fibroids are the most common form of benign uterine tumors [1,2]. They are also known as leiomyomas or myomas. They occur in 50-60% of women and almost a third of women with leiomyomas require treatment due to symptoms [3]. The use of a uterine sparing strategy with surgical treatment to treat uterine myoma is popular, because it not only provides adequate symptom control, but also preserves fertility. Therefore, abdominal myomectomy may still considered as a good choice for women with huge fibroids and who need to maintain their reproductive function [4,5]. Uterocutaneous fistula is a rarely seen complication of myomectomy procedure. A few articles has been written about this complication. This entity represent an abnormal tract between two epithelial surfaces of the skin and the uterus [6]. In the present case, we introduce a patient who presented with uterocutaneous fistula after myomectomy procedure and underwent surgical treatment eventually.

Case Presentation

A 32-year-old, virgin women presented to out-patient clinic of Suleymaniye Maternity, Research and Education Hospital with the complaint of pelvic pain and bulk symptoms. The woman had neither systemic disease nor previous surgery. On abdominal examination, the uterus was enlarged till the level of umblicus. Her transabdominal ultrasonography revealed a giant subserosal leiomyoma with 12x13 cm in dimension that was located on the anterior uterine wall. The woman was hospitalized in order to perform abdominal myomectomy. A vertical incision was made in the serosal surface of the uterus through the myo-
metrium down to the myoma. After the removal of the myoma, the myometrium was closed in two layers. Subsequently, visceral peritoneum, parietal peritoneum, and abdominal fascia were closed respectively. She was successfully operated and the postoperative visits were unremarkable. Then the patient was discharged on the 3rd post operative day. On the 20th postoperative day, the patient began to suffer from pain, abdominal distention and erythema on the incision and presented to hospital again. On physical examination, she had tenderness, induration of the wound and hemorrhagic discharge through an opening on the abdominal incision. Gram stains and cultures of the discharges by a sterile cotton swab was performed. Her body temperature was 38.2°C. Her laboratory results were WBC:18,07 (103/μL) and CRP (c-reactive protein): 65 mg/L. Ceftriaxone 1 gr. intravenously twice a day was administered empirically for 7 days. Staphylococcus lugdunensis was isolated and intravenous metronidazole (3g/day) was added to existing treatment. Contrast enhanced computed tomography (CT) clearly demonstrated a fistula tract with a thickness of 0.7 cm between the skin and the uterus (Figure 1). Despite of intravenous antibiotic therapy, fever, leukocytosis and high CRP levels were persisted. The patient had a wish to preserve fertility and explorative laparotomy, fistulectomy and primary repair of myometrium were performed (Figures 2-4). Pathologic examination showed granulation tissue and endometrial epithelization. After operation, acute phase reactants were normalized dramatically and the patient was discharged on the 6th postoperative day. The patient had no complaints on the third postoperative months and experiences regular menstrual cycles.

**Discussion**

A fistula is defined as an abnormal connection between two epithelium lined organs. Uterocutaneous fistula is an abnormal tract between the skin and the uterus. The pathognomonic symptom of uterocutaneous fistula is bloody discharge from the skin that occurs simultaneously with menstruation [6]. Definitive diagnosis is made when the fistula tract is demonstrated. It may be possible with ultrasonography, contrast studies such as fistulogram, hysterosalpingography, CT and MRI [7]. In our case; the patient was presented with hemorrhagic discharge and the diagnosis was established by contrast enhanced computerized tomography.
Uterocutaneous fistula formation may be related to multiple previous cesarean deliveries, diabetes mellitus, intrauterine devices and endometriosis [8]. In our case; the woman had neither systemic disease nor previous surgery. Symptomatic leiomyomas require medical and/or surgical therapy. Laparoscopic and abdominal myomectomies are surgical options for subserosal myomas. Contraindications to laparoscopic myomectomy include the presence of intramural myoma greater than 10-12 cm in size or more than 3 myomas in different sites of uterus, requiring numerous incisions [9]. In our case; the size of the myoma was huge and we decided to perform abdominal myomectomy. Total abdominal hysterectomy together with excision of the fistula tract has been reported to be definitive treatment [7,8]. Medical treatment with GnRH agonist administration was also reported in the literature [6]. In our case; the clinician gave information about the medical treatment options for uterocutaneous fistula. When considering patient wish to retain her fertility and age in our case, we performed fistulectomy and primary repair of the fresh myometrium. The period for fistula formation after the procedure was given between 3 months to 3 years in the literature [7,10]. 20 day postoperative period seems to be short for the fistula formation. Infectious process that disrupts the continuity of the tissues involved is speculated such an early fistula formation. In conclusion uterocutaneous fistula following myomectomy is a very rare condition in women. Fistulectomy without hysterectomy and intravenous large spectrum antibiotics have a favorable prognosis.

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**Declaration of Interest**
None
References