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CASE REPORT

A Rare Genital Abscess Etiology Rectosigmoid Adenocarcinoma

ABSTRACT

Genital abscess, a complication of pelvic inflammatory disease (PID), mostly occurs in women of reproductive age and may become a life-threatening condition requiring emergent surgery. Genital abscesses rarely develop secondary to gastrointestinal tract infections. In our case, a sigmoid colon perforation was detected in a woman of reproductive age who underwent laparotomy with a preliminary diagnosis of tubo-ovarian abscess. The condition progressed to sepsis within hours, and the perforation developed secondary to colon malignancy. Tubo-ovarian abscesses in women of reproductive age are usually easy to diagnose. However, gastrointestinal malignancies are rare at this age, so they are often not considered as diagnostic options and may be overlooked. Proper documentation of clinical differential diagnoses for managing complicated gynecological emergencies contributes positively to prognosis. Our case, which required a complex and multidisciplinary approach, is important as an example of rapid and effective management.

Keywords: Colon perforation, female, genital abscess, rectosigmoid adenocarcinoma, reproductive age, sepsis

A genital abscess is one of the major complications of pelvic inflammatory diseases caused by sexually transmitted infections of the female genital tract (1), vaginal flora (dysbiosis), or sometimes secondary to infections of the gastrointestinal tract. Although rare, genital abscesses may develop secondary to gastrointestinal tract infections. These abscesses mostly occur in women of reproductive age and may become life-threatening, requiring emergent surgery (2). In this report, we emphasize the important role of gastrointestinal tract pathologies in the comprehensive investigation of the source of infection. We also present a case of a female patient in her reproductive years who desired children. Her condition rapidly progressed to septic shock, and the diagnosis was made during laparotomy.

CASE REPORT

A 30-year-old female patient was admitted to the emergency room with complaints of right lower quadrant pain. At the time of admission, her general condition was good, and her vital signs were normal. On abdominal examination, there was tenderness to palpation, but no guarding or rebound tenderness. Her history revealed two previous vaginal births (gravida 2, para 2), no chronic diseases, and no current medications.

Five months earlier, she had undergone emergency diagnostic laparotomy with a preliminary diagnosis of acute abdomen and tubo-ovarian abscess. During that procedure, she was intraoperatively evaluated for acute appendicitis, and a general surgeon performed an appendectomy. She had no other bowel or adnexal surgery.

From her family history, it was noted that her mother had died of colon cancer, and her sister had undergone a colonoscopy. The patient reported complaints she believed were related to her previous appendicitis surgery. Recently, she had experienced increasing loss of appetite, nausea, and weight loss (approximately 25 kilograms in the past year). Her body mass index was 19 kg/m^2.

Transvaginal ultrasound revealed an anteverted uterus, an endometrial thickness of 12 mm, and a right adnexal mass approximately 5 cm in size, which could be compatible with an abscess.

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In the tomographic examination, there was a tubo-ovarian abscess (TOA)-like mass with a complex tubular and cystic structure of approximately 5 cm in the right adnexal area, along with a 3 cm soft tissue mass in the presacral area. Based on these findings, the patient was hospitalized with a preliminary diagnosis of pelvic inflammatory disease. A COVID-19 PCR test was performed due to pandemic conditions and returned negative. The patient was started on dual antibiotic therapy.

During close follow-up, she developed significant acute abdomen findings and symptoms of septic shock. Emergency laparotomy was performed with the preliminary diagnosis of a genital abscess. Intraoperative evaluation revealed widespread abdominal adhesions and tubo-ovarian abscess formation in the right adnexa, secondary to sigmoid colon perforation. Abscess drainage and a right salpingo-oophorectomy were performed, and intraoperative consultation with the general surgery team was requested.

During surgery, the general surgeons identified a mass originating from the presacral region that invaded the rectum and bladder. A palliative approach was planned, and a colostomy was performed. Further evaluation and definitive treatment were deferred to the postoperative period.

DISCUSSION

A tubo-ovarian abscess (TOA) usually results as a complication of untreated or inadequately treated acute pelvic inflammatory disease (3). The differential diagnosis of TOA includes appendicular mass, endometrioma (or other ovarian cysts or tumors), ruptured or unruptured ectopic pregnancy, myoma, diverticulitis, or underlying malignancy. Ultrasound (US) is the most commonly used imaging method in PID/TOA cases (4). Although not a specific diagnostic tool, it is useful in evaluating structures such as the appendix, colon, and bladder, which may be involved in pelvic inflammatory processes or malignancies.

Tubo-ovarian abscesses are typically easy to diagnose in women of reproductive age, but since gastrointestinal malignancies are rare at this age, they are not often considered in the differential diagnosis and may be overlooked. Gastrointestinal malignant tumors can have an aggressive course without symptoms in young patients and may lead to serious complications. Rupture of a TOA is a life-threatening emergency requiring prompt and aggressive treatment (5). In our case, the patient's clinical condition rapidly progressed to sepsis. She was taken for emergency laparotomy under the primary pelvic inflammatory disease protocol, despite the contamination seen in atypical locations on tomography. Thus, during infection workup, clinicians should always consider PID to avoid delayed management, as in our patient.

An interesting aspect of our patient's history is that during a laparotomy performed five months earlier for pain, no additional pathology was detected, and only an appendectomy was performed. The diagnosis of asymptomatic gastrointestinal tumors often requires advanced imaging or endoscopy. The patient's young age made it unlikely for gastrointestinal malignancies to be considered in the differential diagnosis of abdominal pain. Regardless of the underlying cause, colon perforation can lead to genital abscesses with a severe clinical course. Aggressive medical or surgical treatment is required, and abscess rupture may result in sepsis (6). Although no recent data on mortality rates for abscess rupture exist, earlier studies from the 1960s suggest rates as high as 1.7 to 3.7 percent (5,7).

CONCLUSION

In this case, clinical observation, ultrasound, and laboratory findings suggested genital abscess as the preliminary diagnosis. However, the mass and contaminated areas identified in the sacral region during emergency tomography were secondary considerations. The patient's medical history was crucial in the diagnostic approach. It should be noted that symptoms such as constipation, loss of appetite, and weight loss played an important role in identifying gastrointestinal pathologies and making the correct diagnosis during surgery.

Although advanced diagnostic methods were used, the diagnosis of rectosigmoid malignancy was made only after laparotomy. While technological advancements in medicine facilitate diagnosis, they can sometimes overshadow basic diagnostic approaches such as thorough history-taking and physical examination. In managing diseases, it is critical to combine basic findings with advanced diagnostic methods. We believe that careful anamnesis and a thorough evaluation of differential diagnoses in preparation for exploratory laparotomy can strengthen preoperative preparation and help prevent serious complications.

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