Case Report

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Rectal Perforation: A Rare Complication Following Uncomplicated Vaginal Delivery

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ABSTRACT

Rectal perforation during vaginal delivery is an uncommon event. It can cause complications including pelvic abscess and other life threatening illnesses, if not treated early. We here report a 24 years lady presented with a week long history of abdominal pain and fever associated with rectal discharge three weeks after uncomplicated vaginal delivery. Abdominal computed tomography findings suggestive of rectal perforation and revealed a huge pelvic abscess. A pigtail catheter was inserted into the pelvic abscess under transrectal ultrasound guidance and drained successfully. The patient recovered uneventfully and discharged 5 days after admission.

Keywords: Pelvic abscess; rectal perforation; uncomplicated vaginal delivery

INTRODUCTION

Perforation of rectum is an extremely rare condition, and very few observations on rectal preformation have been published. Most of the reported cases are either iatrogenic or associated with rectal prolapse.[1,2] Pathological conditions such as diverticular disease, carcinoma, colitis, blunt or penetrating trauma, intraluminal injury from faulty instrumentation may also cause rectal perforations.[3] Rectal perforation, particularly associated with obstetrical conditions has not been described in the literature. We, here report, a case of pelvic abscess due to rectal perforation following uncomplicated delivery.

CASE REPORT

A 24 years primipara lady with a history of gestational diabetes mellitus (GDM) had uneventful vaginal delivery at 40 weeks of gestation. After 3 weeks, initially she developed malaise and decreased appetite. One week later she presented to hospital with complaint of lower abdominal pain, fever and constipation with passage of thick whitish and greenish discharge from rectum. There was no history of rectal trauma. The general examination revealed ill looking febrile 103° F, tachycardiac 109 beats per minutes, with normal respiratory rate and blood pressure .On abdominal examination, pelvis mass of 16 weeks size noted although cervix was healthy looking without any abnormal discharge on per speculum examination. On vaginal examination: non tender pelvis mass of 16weeks noted and pouch of Douglas (POD) was full with vague content of firm consistency. On per rectal examination, greenish discharge was oozing out, the amount increased with pressure on the abdomen pelvis mass. Laboratory examination showed a total leucocyte count of 16,100 per mm^3 with 86% neutrophils, platelet count of 6,59,000/mm^3 with markedly elevated C-reactive protein level (more than 16 times the upper limit of normal [10mg/L]). Her blood sugar level was within normal limit.

Ultrasonography findings revealed pelvic abscess. Computed tomography (CT) scan confirmed 11.8x4.3x10.5cm (266ml) pelvic collection in POD compressing uterus and rectum (Figure 1).

Figure 1. Contrast-enhanced CT of the pelvis showing pelvic abscess.

Computed tomography scan also showed communication (linear hypodense tract) between the pelvic collection and anterior wall of rectum; and found to have sealed perforation in the rectum. Circumferential, segmental inflammatory thickening of wall of sigmoid colon and distal third of rectum was existed. Size of the uterus was

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9.5x5.1x7.5cm with no focal lesion. Under broad spectrum antibiotics coverage, a total of 395ml of foul smell greenish yellow discharge was drained using transrectal ultrasound (TRUS) guided pigtail catheter. On 4th post procedure day, flushing was done and the pigtail catheter was removed after confirmation of completion of complete evacuation in the POD by ultrasound. The patient was discharged on the 5th day of the admission. On follow up after one week, patient remained asymptomatic.

DISCUSSION

Perforation of the rectum is an extremely rare condition and only a very few studies have described on rectal perforation. The majority of reported cases of rectal perforation are due to iatrogenic and or as the results of pathological conditions such as diverticular disease, carcinoma, colitis, blunt or penetrating trauma, intraluminal injury from faulty instrumentation.[1,2] This case, however, was neither due to iatrogenic, nor associated with pathological conditions. Rectal perforation due to uncomplicated delivery has not so far been described in the literature. Probably, this is the first report of pelvic abscess due to rectal perforation following uncomplicated delivery.

The diagnosis of rectal perforation might be difficult during its early stage owing to non-specific presentations.[4] In this study, the patient initially presented with complaints of malaise and decreased appetite but found no other abnormal findings. One week later, she presented with complaints of abdominal pain, fever associated with rectal discharge. CT scan confirmed collection of abscesses in pelvis and sealed perforation in the anterior wall of the rectum indicative of perforation in the past (Figure 1). Clinical examination together with imaging technique may improve early identification and management of subclinical rectal perforation. And, CT scan plays a vital role in early recognition and treatment, especially when the patient is in subclinical state or presented with non-specific presentation.[4]

Rectal perforation is managed with fecal diversion, primary repair of rectal perforation and sphincters muscle, presacral drainage; and parenteral antibiotics.[5] In this report, the patient was successfully treated with the minimal invasive technique with use of pigtail catheter for draining pelvic collection. Although pigtail catheter is placed under local anesthesia,[6,7] in this case, we, drained the pelvic abscess through pigtail catheter without any forms of anesthesia.

CONCLUSIONS

Rectal perforation along with pelvic abscess following uncomplicated delivery is an uncommon event. Early identification and management of rectal perforation is necessary to prevent further complications.

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