

Case Report

Spontaneous uterine perforation in post menopausal patient – A case report

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Abstract

A 64 years postmenopausal woman approached emergency department due to acute abdominal pain and vomiting. Gynecological history of mild postmenopausal bleeding and increased vaginal discharge was noted since 10 days. Per abdomen was very tender distended, muscle rigidity. Emergency Explorative laparotomy was performed under the diagnosis of perforation of gastrointestinal (GI) tract. The uterus was found to have posterior wall perforation of 2x1 cm dimension and purulent material exuding from the uterine cavity was identified. Thus was diagnosed as perforated uterus due to pyometra. A total abdominal hysterectomy with bilateral salpingo-oophorectomy was done uneventful. Patient recovered completely without any complications and was discharged. Perforation of uterus due to pyometra can cause the peritonitis in postmenopausal females with signs of acute abdomen as an unusual but serious condition.

Key words

Post-menopausal, Acute abdominal pain, Perforation, Pyometra, Peritonitis.

Introduction

Pyometra is an accumulation of purulent material in uterus. The reported incidence is 0.1-0.5% in Gynecological patients and much higher in elderly women [1]. The most common cause of pyometra is malignant diseases or benign tumours like leiomyoma, endometrial polyps, senile cervicitis, cervical occlusion after surgery, puerperal infections and congenital cervical anomalies. Spontaneous rupture of uterus is an

extremely rare complication of pyometra. So being rare condition this case added the report of spontaneous uterine perforation due to Pyometra.

Case report

A 64 years post-menopausal woman approached emergency department due to acute abdominal pain and vomiting since 8 hours. She had been treated by general practitioner with anti-spasmodic and analgesic but was not relieved.

Gynecological history of mild postmenopausal bleeding and increased vaginal discharge was noted since 10 days. Physical examination indicated of 110/60 mmHg Blood pressure, her pulse rate was 130/min and she was afebrile. Per abdomen was very tender distended, muscle rigidity. Rebound tenderness was absent. Bowel sounds were hypoactive. Laboratory studies showed WBC count 5100/ mm³, 92.3% neutrophil and hemoglobin of 13 g/dl. A plain chest X-ray film showed free air under the diaphragm on both side. The abdominal X-ray revealed no evidence of intestinal obstruction.

Emergency explorative laparotomy was performed under the diagnosis of perforation of GI tract. The investigation of gastrointestinal tract (GIT) and gallbladder failed to reveal perforation. The uterus was found to have large posterior wall perforation of 2x1 cm dimension and purulent material exuding from the uterine cavity was identified. The uterus was soft and slightly enlarged. Both parametria were thickened and inflammatory changes were present. The fallopian tubes and ovaries were normal. A total abdominal hysterectomy with bilateral salpingo-oophorectomy was performed. (Photo – 1A, 1B) Culture of pus grew E. coli. Histological examination revealed pyometra and no evidence of malignancy.

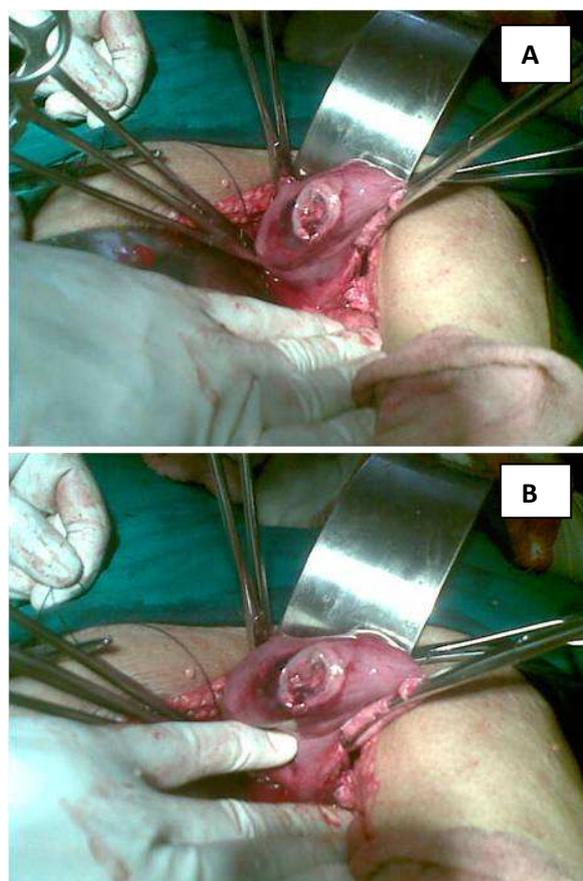
She was observed in ICCU with strict management of respiration and circulation for postoperative 3 days. On 3rd post-operative day, she was transferred to Gynecology ward under antibiotic therapy with cefepime and metronidazole, her condition improved post operatively. Patient recovered completely without any complications and was discharged on eighth postoperative day.

Discussion

Pyometra can be caused by stenosis of the cervical canal, which may result from cervical carcinoma, occur as sequelae after amputation of the cervix, radiation cervicitis, or postmenopausal involution of the uterus [2].

Various benign and malignant lesions have shown to cause pyometra. Pyometra is a rare event in general population but more commonly in elderly women. Endometrial discharges collected in the uterine cavity, becomes infected with opportunistic bacteria probably reaching the body of the uterus from the vagina. Rupture of the pyometra into the abdomen is as complications of pyometra [2], Malignant disease is present in 35% of cases [3], or intrauterine device [4].

Photo – 1A, 1B: Abdominal hysterectomy with bilateral salpingo-oophorectomy.



In study by Bangal, et al. patient with pyometra presented to the emergency department with an acute abdomen only [5]. Similarly was the presentation of the postmenopausal women in our study which had no relative grievousness her past history.

Presentation of pyometra may be concealed and can unusually present with peritonitis in elderly

which gets falsely correlated with the alimentary abnormalities but rarely to reproductive cause in females. This unusual presentation of rupture of pyometra with subsequent development of peritonitis was due to thinning of walls of the uterus or endometritis.

In differential of acute abdomen, the pyometra perforation was suspected only in 15.8% patients [3]. Study suggest that in pyometra total abdominal hysterectomy with bilateral salpingo-oophorectomy with post-operatively, broad-spectrum antibiotics and intensive care as ideal management [6].

Pus culture of isolated from patients with pyometra revealed *S. agalactae* infections [7], *Streptococcus* spp. [8], *E. Coli* [5] and tubercular cause. In our patient after total abdominal hysterectomy pus culture from the peritoneal cavity showed *E. Coli.* organism.

The cause of absence of cervical occlusion causing pyometra and perforation [9] as well as histological findings of no cancer was also noted by some researchers.

Histopathological examination in our study also did not have any evidence of malignancy. But a detailed pelvic examination is needed to be performed to rule out associated malignancy in pyometra patients. The diagnosis of pyometra causing perforated uterus is difficult because it is usually asymptomatic and only revealed after laparotomy.

Conclusion

Perforation of uterus due to pyometra can cause the peritonitis in postmenopausal females with signs of acute abdomen as an unusual but serious condition. Early diagnosis will avoid unforeseen complication in the elderly females without malignancy.

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