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Uterine Perforation in Postmenopausal Woman – Case Report

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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Case Report

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ABSTRACT

Rupture of uterus occurring spontaneously is a rare occurrence. Here we are presenting a case of spontaneous postmenopausal rupture of uterus caused by pyometra. This can be associated with high morbidity if generalized peritonitis and sepsis occurs. The symptoms will be like acute abdomen similar to that caused by ruptured bowel or gastric perforation. In case of postmenopausal rupture like ours, gynaecological symptoms are very less. Hence the diagnosis becomes difficult and challenging. Here we report a rare case of uterine rupture that occurred in a postmenopausal woman because of pyometra. The patient landed up in the surgical department as case of acute abdomen. Definitive diagnosis was made at the time of laparotomy only when exploration was done and gynaecologist called.

Keywords: Postmenopausal; uterine rupture; generalized peritonitis; spontaneous rupture; pyometra.

1. INTRODUCTION

By pyometra we mean the collection of purulent discharge inside the uterine cavity [1] This can occur in women with cervical stenosis where drainage of uterine contents does not occur [2] The incidence of pyometra is 0.1-0.2% of all gynaecologic cases, which is a small number.

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Most of the cases occur in elderly women mainly postmenopausal women (13.6%) [3] Spontaneous rupture of the uterus resulting from pyometra is quite rare. And rupture causing generalized peritonitis is still rarer. Till date not more than 50 cases of uterine rupture occurring because of pyometra have been reported. We are presenting here a patient aged 67 years, who was admitted to surgery department with presentation of acute abdomen with the provisional diagnosis of perforation peritonitis, emergency laparotomy was planned.

2. CASE REPORT

The patient was 67 years old, who had five children all alive and well. She was admitted to our hospital with history of pain in abdomen since last or previous night. Patient had history of collapse the day before admission around 5pm and had been seen by private practitioner. After examination practitioner counselled that she was having hypertension and abdominal distension which may be because of appendicitis or perforation and needs referral to higher centre. But relatives of the patient brought her for admission in the morning around 10.30 am.

On probing of relatives, some history was obtained. The patient was para 5 and postmenopausal for 35 years now. She had history of abdominal pain. Her gynaecologic history was unremarkable with no gynaecological complaints. There was no history of vaginal discharge or postmenopausal bleeding. Also there was no history suggestive of any minor surgery like endometrial biopsy or D&C dilatation and curettage.

On general examination her condition was poor, pulse rate was 130 beats/min, blood pressure was 90/50 mmHg and respiratory rate was 26/min and temperature was 37.8 °C. After admission the laboratory investigations showed hemoglobin: 10.4 gm/dL, urea: 71 mgm/dL, creatinine 3.7 mgm/dL. TLC was 24000. A quick bedside abdominal ultrasound showed free fluid in the peritoneal cavity. She was admitted to surgery ward as a case of acute abdomen with suspicion of perforation peritonitis. After investigations and preparation the patient was posted for surgery. Purulent fluid was drained form the abdominal cavity, approximately 1litre. Upon further exploration it was found that there was a rent in the posterior wall of the uterus from where the drainage was coming out. The rent was approximately 1.5-cm-long. Other abdominal organs were found to be normal. Gynaecologist on call was called for opinion. After exploration, the decision of hysterectomy was taken. TAH with BSO Total hysterectomy with bilateral salpingo-ophorectomy was done. Peritoneal washing was done. Haemostasis was achieved & drain was inserted. Thereafter abdomen was closed in layers. Patient was transferred immediately to surgical ICU.

The patient was kept in ICU intensive care unit for three days with intravenous fluids, oxygen inhalation and intravenous antibiotics. Ceftriaxone with sulbactum1.5gm BD and metronidazole 0.5 g TDS was administered. Postoperative the patient was monitored well. Investigations done were within normal limits with haemoglobin of 10.2 gm/dl, LFT & KFT within normal limits. Thereafter the vital parameters remained stable and the patient was shifted out of ICU after three days. She remained stable thereafter. Post-operative period was uneventful.

3. DISCUSSION

Pyometra is a rare condition however it is found more in postmenopausal women. This can be because of stenosis of the cervical canal occurring because of benign or malignant conditions of the genital tract like tumours, prior surgery, or adjunct therapy like radiotherapy it can also occur because of senile changes [4] The classical symptoms reported in such cases are lower abdominal pain, purulent vaginal discharge & postmenopausal bleeding [5] However a large percentage of patients may not have any symptoms [6] Our patient had abdominal pain, but she did not have postmenopausal bleeding or discharge.

GI perforations are responsible for almost 90 % of cases of acute abdomen [7] Spontaneous uterine rupture is a condition not seen frequently. It is known to occur in reproductive age group predominantly during pregnancy and labour, or during insertion of intra uterine contraceptive device. Rarely does it occur as a result of pyometra in post-menopausal women [8] The classic symptoms seen in cases of uterine perforation include sudden onset of abdominal pain, fainting attack, giddiness, vomiting, fever etc [9] Perforation of the uterus can be usually seen in association with serious conditions like cervical or endometrial cancer [10] Malignant disease can be found in 35% of cases [2] Our patient did not have history of minor surgery in form of endometrial biopsy or D&C done in the

past and had not been suspected of having gynaecological cancer. Also there was no evidence of malignancy during surgical exploration and on histo-pathology. Hence the most likely cause of pyometra in our patient was pyometra accumulating as a result of occlusion of the cervix. The common site of spontaneous uterine perforation is usually at the fundus of the uterus in majority of the patients, but may occur over anterior or posterior walls in some women [9]

It is difficult to diagnose uterine perforation caused by pyometra pre-operatively. Diagnostic modalities may show pneumoperitoneum or intra-abdominal fluid collection [6] Sonography does not help much in the diagnosis of ruptured pyometra which can be confused with intestinal perforation [11] Additional methods for diagnosis in cases of acute abdomen can be computed tomography (CT) scan and MRI [12] Correct preoperative diagnosis is possible in only about 30% of cases [9] In our patient emergency ultrasound done which showed generalized free fluid in pouch of Douglas and general peritoneal cavity. Abdominal paracentesis was done pre-operatively which resulted in purulent fluid being obtained. Emergency laparotomy was done immediately with the diagnosis of perforation peritonitis.

In cases of uterine perforation caused by pyometra the mortality rate stands at about 15%. In majority the cause of death is sepsis resulting in multiple organ failure [9] Uterine rupture resulting from pyometra is associated with high morbidity and mortality [13] The women present with no gynaecologic symptoms and confusing abdominal signs, which makes diagnosis difficult prior to surgery [14]

4. CONCLUSION

The possibility of this rare diagnosis of uterine rupture should be kept in mind when there is such a presentation. In postmenopausal women presenting with acute abdomen and peritoneal collection, the possibility of uterine rupture should always be excluded by clinical and investigative methods.

CONSENT AND ETHICAL APPROVAL

As per international standard or university standard guideline patients consent and ethical approval has been collected and preserved by the authors.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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