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AN UNUSUAL PRESENTATION OF ACUTE ABDOMEN IN EARLY PREGNANCY: A CASE REPORT
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AN UNUSUAL PRESENTATION OF ACUTE ABDOMEN IN EARLY PREGNANCY: A CASE REPORT

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ABSTRACT

Acute abdomen is characterized by pain, tenderness and muscular rigidity, and for which emergency surgery must be considered. Acute abdomen in pregnancy can be obstetric or non-obstetric. Differential diagnoses include acute appendicitis, gastroenteritis, bowel obstruction and perforated peptic ulcers, ectopic pregnancy, peduncular torsion of an ovarian cyst, ovarian bleeding, pelvic inflammatory disease, mesenteric venous thrombosis, rupture of visceral artery aneurysm and foreign bodies.

The case report presented is of a 23-year-old, para 2+1, gravida 4 at 16 weeks' gestation who presented to the Accident and Emergency Department of Kenyatta National Hospital with a four-day history of abdominal pain, constipation and vomiting. General examination revealed a sick looking, dehydrated, pale lady with a tachycardia of 108 beats per minute and blood pressure of 107/70mm/Hg. Abdominal examination revealed gaseous distension, generalized tenderness, rebound tenderness and absent bowel sounds. The external cervical os was closed and had candidal discharge. A kidney, ureter and bladder ultrasound reported free fluid in the hepatorenal space. An exploratory laparotomy found a 15-20cm long transparent plastic tube invaginating through the anterior pylorus/first part of duodenum with a small purulent pocket around it. An omental patch and peritoneal lavage were done and a drain left in-situ. The patient did well post-operatively and was discharged on day 12 post-op. This case is presented to raise awareness of less common causes of acute abdomen and highlight the risks of clandestine abortion attempts.

INTRODUCTION

Acute abdomen is a general term for conditions or diseases accompanied primarily by sudden abdominal pain for which a decision to perform emergency surgery must be made hastily. It is estimated that 0.2-1% of all pregnant women will require some form of non-obstetrical surgery in the course of their pregnancy [3]. The documented incidence of acute abdomen during pregnancy is 1 in 500-635 pregnancies [4]. According to Inoue et al., appendicitis accounts for 70.1% of these, followed by ileus (21.0%), peduncular torsion of ovarian cyst (5.3%), and acute cholecystitis and cholangitis (3.6%) [2]. The frequency of acute abdomen in pregnancy due to non- obstetric causes has been estimated at 0.39% [1].Several factors may contribute to diagnostic delays and therapeutic challenges in handling patients with acute abdomen in pregnancy. Symptoms of early pregnancy like nausea and vomiting may mimic those of early acute abdomen, and the anatomical displacement of various organs by the pregnant uterus, which enlarges approximately 20 times during pregnancy [5], may obscure the clinical findings. Normal physiologic and hormonal changes may also alter how pathologies present.

In addition, there are concerns surrounding radiological studies such as computed tomography scan and plain radiographs during pregnancy.Non-specific symptoms such as abdominal discomfort, nausea, vomiting, and constipation, even though may be normal in pregnancy, should be treated with an increased index of suspicion for acute abdomen when they are associated with severe abdominal pain, fevers, diarrhea, headache, or signs of peritoneal irritation. Signs of peritoneal irritation including guarding, rigidity, rebound tenderness or silent abdomen need immediate surgical treatment rather than conservative management [4].

THE CASE

A 23-year-old, para 2+1,gravida 4 at approximately 16 weeks' gestation presented with a 4-day history of abdominal pain, constipation, vomiting and per vaginal bleeding. The abdominal pain was constant, generalized but more at the epigastrium and suprapubic regions and aggravated by movement. She had 1-3 episodes of postprandial vomiting per day which was associated with poor oral intake.

She was unable to eat more than a few tablespoons of food without vomiting the entire meal. She was passing flatus but had not passed stool for four days. She reported one episode of per vaginal spotting prior to onset of illness. Her past medical history was only significant for peptic ulcer disease 1year prior.No endoscopy/barium swallow was done. No chronic illnesses were reported; she had no known food or dug allergies and had not undergone any surgeries. Her prior deliveries were both spontaneous vertex deliveries and both children were alive and well. A review of systems identified a mild cough with no chest pain, difficulty in breathing or haemoptysis.

On examination, she was found to be sick looking, on oxygen supplementation by facemask, dehydrated, moderately pale, clinically febrile, not jaundiced, edematous or cyanosed. Vital signs were a pulse rate of 108beats/minute, respiratory rate of 24 breaths/min and a blood pressure of 96/56mmHg.She was tachypnoeic with a clear chest on auscultation.

She had a gallop rhythm but both heart sounds were heard and no murmurs were picked. On examination of the central nervous system, she was alert, neck was supple and pupils were normal. Her abdomen had minimal symmetrical gaseous distension and was not moving with respiration.

It was tympanitic to percussion and bowel sounds were absent. She had marked generalized tenderness as well as rebound tenderness and fundal height was at the level of the umbilicus. Deep palpation was avoided due to exquisite tenderness. The closed external cervical os had a clear mucoid discharge with thick curd-like discharge on the vaginal walls. Initial Neutrophils 92.4%, Platelet count 137*109/L, ESR 70mm/hr, Urea 2.2, Creatinine 48.6, Sodium 132, Potassium 3.5, AST 16, ALT 4, ALP 63, GGT 5, and Random blood sugar 6.7mmol/l.An obstetric ultrasound showed a single, live intrauterine pregnancy in variable presentation with a regular fetal heart rate of 162beats/minute.

All fetal organs were reported as normal, amniotic fluid adequate for gestation, no free fluid in POD, both adnexae normal and a computed gestational age of 16weeks.An abdominal ultrasound showed normal organs with no lymphadenopathy but there was free fluid in the hepatorenal recess. An impression of intestinal obstruction with peritonitisin early

pregnancy was made and a decision for an exploratory laparotomy was made. The patient was kept nil-per-oral, started on intravenous rehydration, maintained on an input/output chart, given analgesia, propped up on oxygen and a nasogastric tube inserted expressed bilious fluid.

She was also started on intravenous ceftriaxone, flagyl, plasil, esomeprazole, paracetamol and tramadol. Under general anesthesia, a midline extended incision was made.

FINDINGS

Gravid uterus. No soiling in peritonealcavity. A1520cmlong, approximately 4mm diameter transparent plastic tube was found evaginating from the anterior pylorus/first part of duodenum. The perforation was not extending intraluminal, with a small purulent pocket around it.

Done: The site was covered and anchored at four points loosely with omentum. Peritoneal lavage was done. Drain left in-situ. Abdomen closed in layers and operation site dressed.

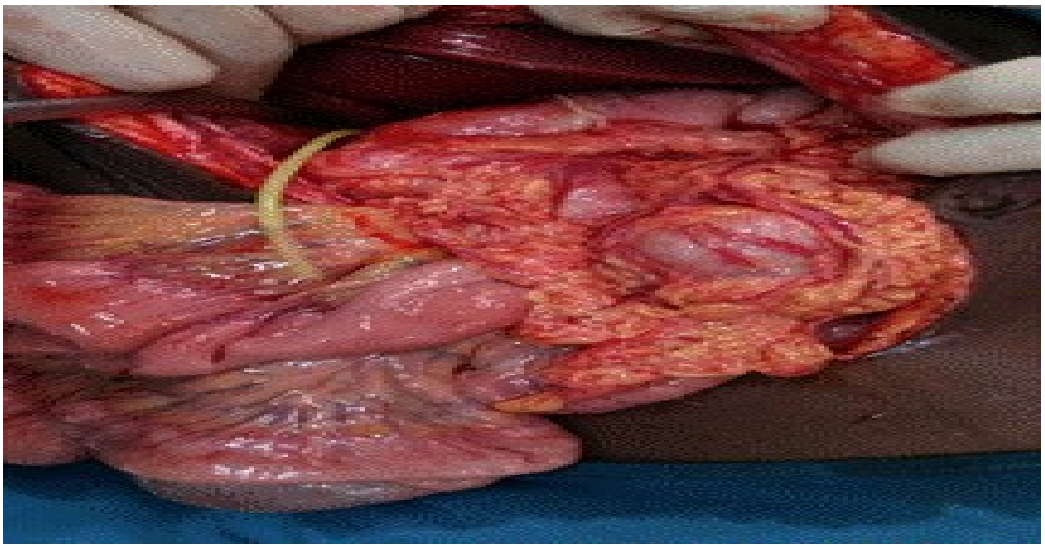


Image 1

Intraoperative picture showing the feeding tube in the upper abdominal area

Image 2
Intraoperative picture showing the feeding tube evaginating from the anterior pylorus/first part **of**

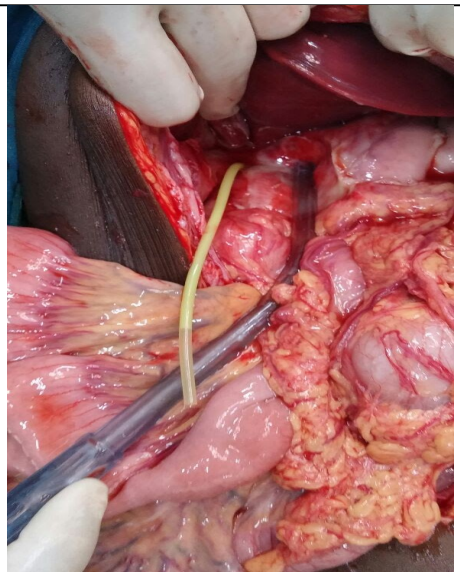
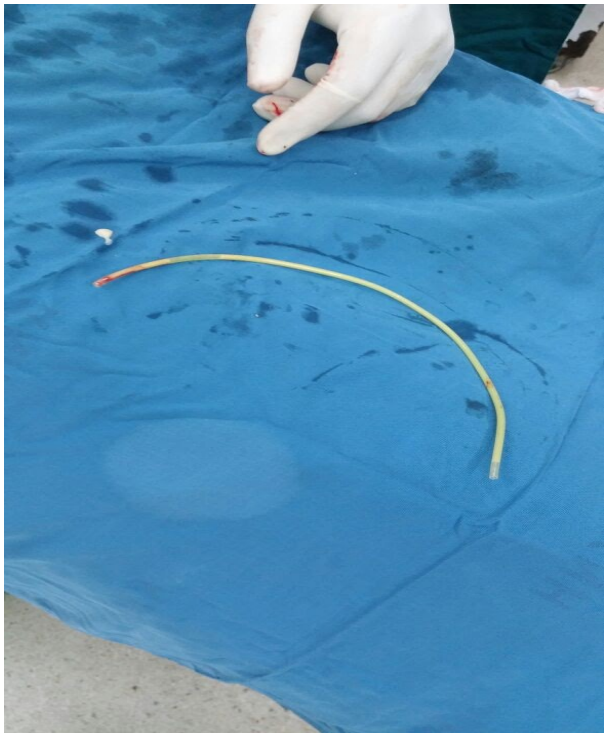


Image 3
Post-operative picture showing the length of the tube with pus in the lumen



Postoperatively, the abdominal distension and pain gradually decreased. The nasogastric tube was removed on the 4th postoperative day. Urinary catheter and abdominal drain removed on day five. She was started on semisolid food on day six. Repeat abdominal and obstetric scans normal. The patient did well to discharge on the 12th post-op day.

DISCUSSION

Acute abdomen in early pregnancy is fairly common and has numerous differentials which include rare diagnoses such as abdominal foreign bodies. A history of attempted clandestine abortion is usually not forthcoming during initial interrogation and thus a high index of suspicion must be assumed. Early surgical management leads to better outcomes without compromising the health of the mother or the fetus [1]. In the diagnostic work up, abdominal findings are indispensable for both identification of the causative disease and planning proper treatment. Abdomino pelvic ultrasonography is the imaging modality of first because it simple, safe and non-invasive and gives a large amount of information that can exclude most diagnoses associated with acute abdomen [2].

Advances in medical and surgical treatment of acute abdominal conditions in pregnancy means that timely surgical intervention is possible if required and the surgical principles for non-pregnant women routinely apply [4].

The lessons learnt from this case are that clients may not be forthcoming with full information especially as concerns attempted abortions, we should always have a high index of suspicion and a low threshold for surgical intervention in patients with an acute abdomen in early pregnancy.

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