ACUTE INTESTINAL OBSTRUCTION IN PREGNANCY: LESSONS FOR THE OBSTETRICIAN

MEDICAL SCIENCE

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ABSTRACT

Acute intestinal obstruction is a very rare condition in pregnancy. It poses a diagnostic problem because it may mimic pregnancy-related symptoms. The following paper describes a case of acute intestinal obstruction in late pregnancy which resulted in irreversible shock and death soon after delivery. Lessons from the mode of presentation of this condition are discussed to highlight this rare complication of pregnancy.

Keywords: *Pregnancy, surgical complication, acute intestinal obstruction, obstetrician.*

CASE REPORT

The patient was a 34-year-old teacher, gravida 2 para 1 (full term delivery), baby alive, with a history of laparotomy at the age of 16 years for an unknown indication. She reported to the polyclinic of Komfo Anokye Teaching Hospital in her 36th week of pregnancy with a day's history of fever, chills, abdominal pain and vomiting. Physical examination was unremarkable. She was diagnosed as malaria and treated at the outpatient with chloroquine (intramuscularly and orally) and acetaminophen.

Six days later she reported again still with fever, vomiting and abdominal pain. On this occasion she was found to be ill looking. She was not pale and not jaundiced. The temperature was 38°C, pulse 86 beats per minute and BP 110/70 mm Hg. The heart and respiratory systems were normal. On the abdomen there was a lower umbilical midline scar and a gravid uterus with a symphysio-fundal height of 34cm. The lie was longitudinal and presentation cephalic. The descent was 3/5. The foetal heart rate was 130 beats per minute and regular. There was bilateral renal angle tenderness. The bowel sounds were slightly reduced.

She was admitted and investigated. The haemoglobin was 11.7 g/dl, sickling test was negative and white blood cells were 5.2×10^9/l. The blood film was positive (1+) for *Plasmodium falciparum*. The urine showed a trace of protein and 20 white blood cells per high power field. She was given a repeat anti-malarial course and IV fluids. Treatment for urinary tract infection was also begun. Her general condition subsequently improved and the vomiting reduced.

After 36 hours on admission she got into an uneventful labour and in 8 hours had a normal delivery of a live male baby weighing 2,400g. The placenta was completely delivered and 0.5mg ergometrine was given intramuscularly. The estimated blood loss was 300ml.

Two hours later she was noticed to be restless. Physical examination showed that she was not pale and not dehydrated. The temperature was 36.8°C, the respiration 28/min. but the BP was unrecordable and the pulse was very fast and thready. The lung fields were clinically clear and air entry was good. The abdomen was full but not distended. The uterus was well contracted and there was no bleeding per vaginam. Resuscitation was started with maintenance of the airway, the administration of oxygen by face mask and IV normal saline. The resuscitation was unsuccessful and the patient expired thirty minutes later.

The post mortem examination revealed normal cardiopulmonary and renal systems. The liver was normal. There were bands of adhesions between loops of bowels, mesentery and bowels, and mesentery and the anterior abdominal wall where there was a healed surgical scar. The uterus was intact and empty and overlying about 50cm of obstructed, infarcted and slightly distended ileum.

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There was serosanguinous fluid in the abdominal cavity. The infarct arose from mesenteric and bowel strangulation as a segment of the ileum looped around an adhesion. The cause of death was cardiogenic shock from acute intestinal obstruction.

DISCUSSION

Intestinal obstruction in pregnancy and labour is uncommon. An incidence of 1 in 66,431 deliveries [1] is reported in the literature. This makes it a condition that is not commonly encountered in pregnancy and therefore not frequently thought of. Secondly, the cardinal symptoms of acute intestinal obstruction – abdominal pain, vomiting and constipation – are also common pregnancy related symptoms. These two points combine to create major difficulties in the early diagnosis of acute intestinal obstruction during pregnancy. However, and as exemplified by this case, it is prudent to emphasise that as obstetricians or any other physicians involved in the care of pregnant women, we should not hesitate to look beyond the reproductive system during the evaluation of disorders that occur in pregnancy. This is especially so when these disorders occur in association with factors which can cause other diseases outside the reproductive system. In this patient, the adhesions arising from a previous laparotomy was the cause of acute intestinal obstruction, strangulation and bowel infarction which resulted in the vomiting and abdominal pain. Indeed, adhesions are associated with over 60% of intestinal obstruction in pregnancy [2, 3]. Thus, intestinal obstruction should always be considered as a differential diagnosis when vomiting persists during pregnancy in situations when a previous laparotomy scar is found.

When an abdominal ultrasound scan is performed and there is intestinal obstruction, the dilated small bowels with an abnormal mucosal pattern may be recognised. A plain erect x-ray of the abdomen might also show air-fluid levels and point to the diagnosis. Finally, since pregnancy itself can modify the manifestations of surgical conditions, the obstetrician and physicians who give care in pregnancy should always ask for surgical review in suspicious or problem cases.

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