## Ectopic Pregnancy: An unusual cause of lower GIT bleeding. A case report

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Acute massive lower gastrointestinal bleeding, when it occurs, may present a diagnostic and treatment challenge to the surgeon. We report a case an ectopic pregnancy that eroded the colon and presented with severe rectal bleeding. The paper discusses the differential diagnoses, management and outcome of massive lower gastrointestinal bleeding.

## **Case Report**

A 26-year-old, HIV sero-negative, female presented to the emergency unit of St. Francis Hospital, Nsambya with a 2-days history of passage of large amounts of frank blood per rectum. She had been well until 2 days prior to admission when she noted passage of bloody stool. A few hours later, she passed large amounts of blood clots per rectum. She passed a second and equally heavy bout of blood clots about 12 hours later.

She gave no history of similar episode of rectal bleeding in the past. There was no history of abdominal pain, diarrhoea or constipation. She had no complaints suggestive of tuberculosis, typhoid infection or any long-standing fever or weight loss. There was no history of trauma to the anal region. She gave no history of abnormal vaginal discharge or bleeding or lower abdominal pain in the past. She reported no history of familial bleeding tendency, use of non-steroidal anti-Inflammatory drugs (NSAID) or any anticoagulants. She was not using any contraceptives.

She was a mother of one 4-year-old child. She had had one spontaneous abortion of about 10 weeks 14 months earlier, which she attributed to a febrile illness. Her last menstrual period had started 29 days prior to admission, though she reported that it had been lighter and shorter and lasted three instead of the usual 4 days.

On examination she was ill looking, afebrile, and had marked pallor. The pulse rate was 90 beats per minute

and full volume and had a blood pressure of 120/60 mmHg. She had mild suprapubic tenderness and a vague irregular mass arising from the pelvis, towards the left iliac Fossa, which was attached to the uterus.

Per vaginal examination confirmed presence of a palpable mass in the left fornix, and an excitable cervix. Clots of fresh blood were observed on digital rectal examination. There were no haemorrhoids, fissure in ano, or lesions suggestive of colorectal or anal carcinoma.

She had a haemoglobin estimation of 5.8gm/dl. A pelvic ultrasound scan showed an echo-poor mass in the utero-rectal pouch, which extended to the left adnexia and measured 56mm by 43mm. The uterus appeared normal.

A provisional diagnosis of acute severe lower gastrointestinal bleeding due to a polyp or colonic carcinoma was made. Choriocarcinoma infiltrating the colon was also considered a remote possibility. Resuscitation including blood transfusion was initiated on the night of admission and the patient was scheduled for urgent procto-sigmoidocolonoscopy.

However, each time soap water enema was given as part of preparation for colonoscopy, profuse haemorrhage was sparked off. Endoscopy was deferred and ultimately abandoned for the subsequent 5 days as she went into hypovolaemic shock on 3 occasions. She received 2250ml of whole blood by the 5<sup>th</sup> day of admission. In view of continuing bleeding, the mass in the pouch of Douglas, and failure to perform colonoscopy, a Pregnancy Test was done to confirm or exclude a choriocarcinoma. The Pregnancy Test was positive, upon which laparotomy was done with a working diagnosis of Choricarcinoma or octopic gestation eroding into the colon.

At laparotomy, accessing the peritoneal cavity via a lower midline incision, the sigmoid colon was found adherent on the fundus of the uterus together with a corpus luteum cyst and a left pyosalpinx. Gestational tissue of about 3cm diameter was found. There was a 5mm by 5mm perforation through the sigmoid colon, which was repaired. The left salpinx was resected and the corpus luteum cyst drained.

Histology of tubal section confirmed pyosalpingitis.

Immediate and early postoperative recovery was slow. She was ambulating by the 7<sup>th</sup> postoperative day about when she developed bronchopneumonia and peritonitis. Infection was compounded by severe anaemia.

At re-laparotomy on the 9<sup>th</sup> post-operative day, suppurating peritonitis with matted gut were found. Pus was drained and peritoneal lavage performed. Her general condition deteriorated. She died of septicaemia and anaemia on the 12<sup>th</sup> day after the second laparotomy.

## Discussion

The incidence of lower gastrointestinal haemorrhage varies geographically. The commonest causes of acute lower GIT bleeding are diverticulosis, inflammatory bowel disease especially complicated Crohn's disease, colonic neoplasia, arteriovenous malformations and benign anorectal conditions such as haemorrhoids and anal fissure<sup>1</sup>. Colonic tuberculosis and Typhoid fever may be the causes in the Tropics<sup>2</sup>.

In cases of HIV/AIDS, Cytomegalo virus colitis, idiopathic colonic ulcers and intestinal Kaposi's sarcoma are important differentials<sup>3</sup>.

In 15% of the cases, the source is proximal to the ligament of Treiz (upper GIT). Rare causes that have been reported include aorto-enteric fistula, endometriosis, radiation-induced injury, intussusception, Prader-Willi syndrome and Bowel cholesterol embolization<sup>4,5</sup>. Our literature search revealed no previous report of perforation of the colon by ectopic pregnancy as cause of acute lower GIT haemorrhage.

The pillars of management of acute lower gastrointestinal bleeding are sequential resuscitation, localisation of source of bleeding, specific diagnosis, and definitive therapy. However, these should be done at a pace to match the rate of blood loss<sup>6,7</sup>.

Lower intestinal tract endoscopy is the investigation of choice in site localising and is reported to be successful in 72% - 82%<sup>8,9</sup> of cases. Colonoscopy is favoured over mesenteric angiography with a localising success of 42% - 86% because of less complications and its practicability. Colonoscopy was abandoned in our case due to poor preparation of the bowel. However, Chaundhry et al<sup>11</sup> found in a review 126 colonoscopies done by surgical endoscopists on 85 patients within 24 hours of presentation that in experienced hands, even unprepared colonoscopy is highly successful and safe<sup>10</sup>. Faecal residue prevented adequate examination in only 2 patients. They relied on the cathartic effect of blood and liberal suction/ irrigation to cleanse the colon. Localisation was successful in 97% cases.

Only 10–15% cases of acute lower gastrointestinal tract bleeding necessitate open surgery<sup>11</sup>. In the majority haemorrhage stops spontaneously or at colonoscopy. Segmental colectomy is procedure of choice if bleeding source is identified. Due to the poor condition in which our patient was, surgery was confined to simple closure.

Overall mortality is 10 -18% in different Western studies and is in the majority due to therapeutic errors or associated/underlying disease<sup>10,12</sup>. The postoperative septicaemia in this patient was probably secondary to coexisting pyosalpinx and peritonitis probably secondary to leakage of colonic flora. Other than previous acute haemorrhage, she also had hookworm infestation propping the anaemia.

We present this case as the first report of acute lower GIT haemorrhage due to ectopic pregnancy perforating the colon.

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