Intestinal obstruction from a forgotten artery forceps: a case report

S. O. Fadiora¹, S. A. Olatoke¹, T. O. Bello¹, M. L. Adeoti¹ and S. O. Agodirin¹
Departments of Surgery¹ and Radiology²
Lautech Teaching Hospital, Osogbo

Summary
A 43-year-old multiparous patient was all alive who had abdominal hysterectomy secondary to ruptured uterus 2½ years prior to presentation, was seen with acute (surgical) abdomen. An artery forceps was seen on plain abdominal X-ray and subsequent laparotomy revealed gangrenous ileum. The entire length of the ileum was involved, including the ileocecal valve and part of the cecum. The patient had limited right hemicolectomy and anastomosis of the distal part of the jejunum with the proximal section of the transverse colon. The post-operative period was uneventful and she was discharged to outpatient clinic 2 weeks post operatively.

Key words: Intestinal obstruction, Artery forceps, Plain abdominal X-ray diagnosis.

Résuau
Un patient multipareux âgé de 43 tout qui avait subi une hystérectomie abdominale subtotal de uterus rupturé deux ans et demi avant la présentation, était vu avec un abdomen aigu (chirurgical). On a vu un forceps artère à travers Rayons X abdominal clair et la laparatomie subséquente avait montré ileum gangrenieux. La longeur entière d’ileum était concernée, y compris la valvule iléococcale et une partie de cæcum. Le patient a eu l’hémicolectomie du gauche bref et l’anastomose du côté distal du jejunum avec la section proximale du colon transversal. La période postopératoire était sans de l’incidents et elle a été envoyée au service des consultations externes 2 semaines postopératoire.

Introduction
Intestinal obstruction due to a forgotten surgical instrument in the abdomen is a surgical complication that should not occur. Yet, this is now seen regularly in many developing countries, presumably because of inadequate surgical ethics in the operating room, among the scrub nurses and the operating surgeon. A case of a retained artery forceps that presented with intestinal obstruction after 2 years is presented.

Case report
A 43-year-old multiparous woman was referred to the Accident and Emergency unit of Lautech Teaching Hospital, Osogbo from a private hospital with a working diagnosis of perforated peptic ulcer disease on the 17th of September 2003.

The complaints were abdominal pain, abdominal distension and vomiting all of 3 days duration. She had occasional, mild transient abdominal colics of a year duration before the recent acute onset, no changes in the bowel habits. There was history of dizziness but no fainting attacks. Significant in the past medical history was caesarean hysterectomy 2½ yrs prior to presentation and she was a new a known peptic ulcer disease patient.

Her abdomen was distended with midline hypertrophic infraumbibical scar and did not move with respiration. There was tenderness with rebound. Bowel sound was hypoactive.

A working assessment of strangulated intestinal obstruction was made, presumably secondary to adhesions from previous surgery.

Abdomino-pelvic ultrasound suggested irregular (rt.) iliac fossa mass with absent uterus and features of intestinal obstruction. Plain abdominal X-ray revealed a big artery forceps in the right iliac fossa region associated with dilated bowel loops. (See Fig 1)

Laparotomy findings were serosanguinous ascitic fluid, gangrenous entire ileal loops, including the ileocecal valve and part of the cecum. The loop of the gangrenous ileum
was noted within the eye of the artery forceps, fibrous adhesions of the ileum and artery forceps plastered to the posterior abdomino-pelvic wall. She subsequently has adhesiolysis, complete ileal resection and limited right hemicolecetomy with jejuno-transverse anastomosis and removal of the artery forceps.
She was commenced on cefuroxime, gentamic and metronidazole. The post operative period was uneventful and she was discharged to outpatient clinic 2 weeks post operatively.

Discussion
Small intestinal mechanical obstruction account for about 80% of all cases of mechanical obstructions. The common causes are adhesions, hernias, intra abdominal neoplasm, diverticular strictures and volvulus of either the sigmoid colon or the cecum. The case presented was caused by retained artery forceps during previous surgery.
Retained intra-operative foreign body is increasing, such incidents may result in major injury. In a report on 24 cases of foreign bodies retained after intra abdominal surgery, complications observed included perforation of the bowel, sepsis and in two patients, death. The retention of sponges and instruments are avoidable mistakes, but when it occurs it rightly attracts wide critical press coverage and may jeopardise the professional life of the surgeon. Although the incidence is not yet determined; estimates suggest that the it may be around 1 in every 1000 to 1,500. Possible risk factors identified in the literature were a change in nursing personnel during surgery, the use of inexperienced and untrained nurses and paramedical staff without supervision. Others are excessive blood loss, incomplete count of sponges and instruments, fatigue in the surgical team as a result of prolonged period of the procedure, and in emergency surgery. In our patient the related risk factors are emergency caesarean hysterectomy secondary to multiple huge uterine fibroids associated with excessive intra-operative bleeding.

This case stresses the long-time recommendation of counting and documenting instruments and sponges before and after surgery. The authors recommend early abdominal X-ray and ultrasonography in patients who complain of abdominal pains after abdominal surgery. This may decrease the mortality and morbidity associated with late detection as illustrated by this case, but will not prevent the embarrassment and the medico-legal problems to the surgeon, the scrub nurses and the hospital.

References