



Small Bowel Obstruction following Perforation of the Uterus at Induced Abortion

La Petite perforation d'Obstruction d'Intestin de l'utérus au avortements provoqués

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ABSTRACT

BACKGROUND: Unsafe abortion is an important contributor to maternal morbidity and mortality.

OBJECTIVE: To present a case of small bowel obstruction following perforation of the uterus at induced abortion.

METHODS: A 36-year-old woman, presented at a private hospital, with abdominal pain and weight loss. She had full clinical assessment and laboratory investigations which indicated small bowel obstruction following perforation of the uterus at induced abortion, and was commenced on treatment.

RESULTS: She was para 5+0. Her main complaints were abdominal and weight loss following induced abortion of a 12-week pregnancy, four months prior to presentation. At presentation the tools (ultrasound scan, plain abdominal radiograph and barium enema) used for diagnoses only suggested some form of intestinal obstruction and were unremarkable. Correct diagnoses indicating small bowel obstruction was only made at laparotomy. An exploratory laparotomy, adhesiolysis, small bowel resection, end to end anastomosis and bowel decompression was done after bowel preparation.

CONCLUSION: Laparotomy has an enviable place in bowel injuries secondary to uterine perforation especially when there is a diagnostic dilemma. Nigerian female population requires continuous health education on widespread and effective use of contraception. Physicians need training and retraining on abortion techniques and management of abortion complications. WAJM 2009; 28(5): 337–339.

Keywords: Small bowel obstruction, uterine perforation, induced abortion, mis-diagnosis, laparotomy, abortion.

RÉSUMÉ

CONTEXTE: L'avortement non médicalisé est un contributeur important à la morbidité et la mortalité maternelles.

OBJECTIF: Présenter un cas d'obstruction de l'intestin grêle après une perforation de l'utérus à l'avortement provoqué.

MÉTHODES: A 36-year-old woman, a présenté dans un hôpital privé, accompagnée de douleurs abdominales et perte de poids. Elle avait l'examen clinique complet et des examens de laboratoire qui ont indiqué une occlusion intestinale réduite par suite de la perforation de l'utérus à l'IVG, et a été commencé le traitement.

RÉSULTATS: Elle était para 5 +0. Ses principales plaintes ont été abdominales et perte de poids à la suite d'un avortement provoqué une grossesse de 12 semaines, quatre mois avant la présentation. Lors de la présentation des outils (échographie, radiographie abdominale plaine et lavement baryté) utilisées dans les diagnostics seulement suggéré une certaine forme d'obstruction intestinale et est sans particularité. Diagnostics exacts indiquant une occlusion intestinale n'a été faite que par laparotomie. Une laparotomie exploratrice, adhésiolyse, la résection de l'intestin grêle, anastomose de bout en bout et la décompression du côlon a été fait après préparation de l'intestin.

CONCLUSION: La laparotomie a une place enviable dans les blessures du côlon secondaire à une perforation de l'utérus surtout quand il ya un dilemme diagnostique. Nigerian population féminine qui nécessite une éducation continue de la santé sur l'utilisation généralisée et efficace de contraception. Les médecins ont besoin de formation et de recyclage sur les techniques d'avortement et de la gestion des complications de l'avortement. WAJM 2009; 28 (5): 337-339.

Mots-clés: occlusion intestinale, une perforation utérine, avortement provoqué, diagnostic erroné, la laparotomie, l'avortement.

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Abbreviations: ERPC, Evacuation of retained products of conception; USS, Ultra sound scan.

INTRODUCTION

Complications resulting from unsafe abortion are a major cause of maternal mortality, morbidity, prolonged hospitalisation and reproductive failure in Nigeria.^{1,2} Unsafe abortion accounts for 20-50% of the over 500,000 maternal deaths that occur globally every year.³ The World Health Organization (WHO) estimates that about 40-60 million abortions occur around the world annually and half of these are unsafe.³

Common complications at induced abortion are genital sepsis, haemorrhage, pelvic infection with peritonitis and abscess formation, uterine perforation and gut injury¹. Major complications found in a previous study from management of gut injuries resulting from induced abortions are abdominal wound dehiscence, faecal fistula and postoperative diarrhea.⁴

We present a case of small bowel obstruction following perforation of the uterus at an induce abortion.

Case Report

The patient was a 36-year-old para 5⁺⁰ lady. Last child birth was four years before presentation. She presented at the hospital with complaints of abdominal pain and weight loss of four months duration. She had an induced abortion at 12 weeks gestation four months before presentation in a private hospital and had evacuation of retained products of conception (ERPC) done in another private hospital as a result of lower abdominal pains and bleeding per vaginam after the termination of the pregnancy. Ultrasound scan confirmed retained products of conception. Bleeding per vaginam stopped after the ERPC but the lower abdominal pain became severe, intermittent and colicky. When she reported to the hospital where the ERPC was done, she was hospitalized for four days and treated for infection. She subsequently developed severe intermittent, colicky periumbilical abdominal pain which began three months prior to presentation at the hospital. Abdominal pain persisted after discharge. She had intermittent vomiting, which was on for a month and only subsided a week prior to presentation. As a result of her clinical features, she

was commenced on empirical treatment for Kochs in yet another private hospital. There was a progressive history of weight loss, associated constipation and vomiting. There was no history of chronic cough.

Clinical examination revealed a chronically ill looking woman who was not clinically pale or jaundiced. Her chest was clinically clear. Abdominal examination revealed a firm sausage shaped mass in the supraumbilical and epigastric region associated with visible peristalsis from the left to right. Mass was only slightly mobile. Her bowel sounds were increased. Vaginal and rectal examination was normal. A diagnosis of a large bowel partial obstruction secondary to possible bowel injury at induced abortion, intestinal tumour, bands and adhesions was made. Full blood count, urinalysis, electrolyte, urea and creatinine were normal. Human immune deficiency virus screen was negative. Plain abdominal radiograph revealed paucity of gas in the pelvis and dilated bowel loops. Barium enema showed loss of Haustral markings, a pipestem appearance consistent with chronic inflammation, ulcerative colitis or amoebic colitis. Ultrasound scan (USS) revealed air and fluid filled distension of some small and large bowel loops. There was no associated colonic or other abdominal lesion seen. Conclusion on USS findings was intestinal dilatation secondary to partial large bowel volvulus.

An exploratory laparotomy was planned for after bowel preparation. The peritoneum was entered via a midline abdominal skin incision. Findings at exploratory laparotomy were as follows: a portion of the small bowel 60cm from the ileocaecal junction was sucked into a perforated point at the fundus of the uterus close to the right fallopian tube. This was the focal point around which the appendix and the sigmoid colon formed a complex mass. Proximal to this was a grossly dilated small bowel and a collapsed normal distal portion of the bowel (Figures 1-3 below). The whole length of colon was normal. She had a distal small bowel obstruction bound in a complex mass secondary to uterine perforation following induced abortion.

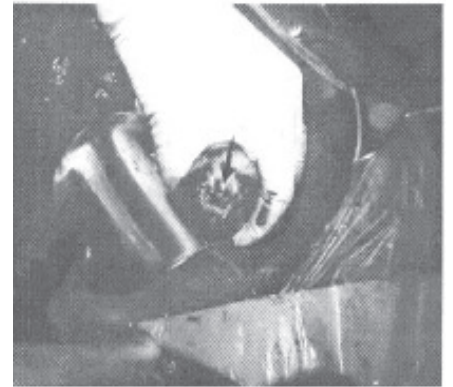


Figure 1: shows site of fundal perforation after adhesiolysis



Figure 2: Adhesion between uterus and small bowel being separated.

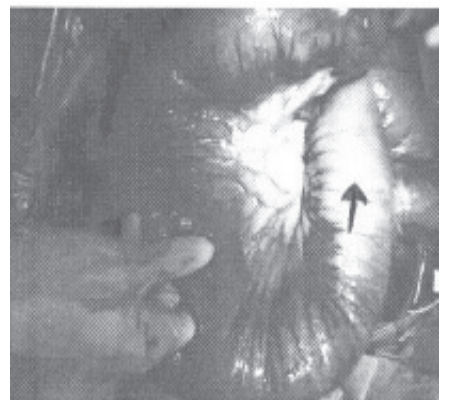


Figure 3: Dilated small bowel as a result of the obstruction

Adhesiolysis was done and the small bowel was freed. The obstructed portion was resected, bowel decompression followed by an end to end anastomoses was done. The resected portion was sent for histology. Peritoneal lavage was done with normal saline and abdominal wall was closed in layers with interrupted prolene to skin. Blood loss was 500mls. Histology revealed changes consistent with

obstruction associated with ulceration. She did well during the postoperative period and there were no complications. She was discharged on the seventh post operative day after removal of stitches and wound was well healed. She was seen again two weeks after her discharge from the hospital at the surgical outpatient and was clinically stable.

DISCUSSION

Abortion complications are a significant cause of maternal morbidity and mortality especially in a country like Nigeria where abortion laws are still restrictive and most abortions are performed clandestinely.⁵ A hospital based study done in Ilorin, Nigeria showed that abortion rates stood at 94.6/1000 deliveries and adolescents contributed 74.4% of all induced abortions.⁶ Majority of abortions therefore occurs among adolescents and young unmarried women.^{5,6} Most abortion complications are induced. The patient was a grandmultiparous married woman who should have stopped child bearing. With adequate contraception, she may not have gotten pregnant in the first place.

Majority of cases reported in the literature involved bowel prolapse through the perforated uterus following induced abortion.⁷⁻⁹ In this case there was no bowel prolapse in to the uterus instead the small bowel got entrapped in adhesions at the site of fundal uterine perforation.

Three different physicians were involved in the management of this case while two were involved in the abortion process. Non-physicians are more likely to be involved in unsafe abortions than trained physicians, as they are more likely to use unsterile instruments and also perform abortions in an unhygienically unsafe environment because they are untrained for this purpose.^{5,7} Recent studies have linked physicians with abortion complications.^{10,11}

The patient had a late presentation in this case, as the interval from uterine perforation to laparotomy was four months. Previous studies have shown interval from instrumentation to presentation to range from five days to 17 days.^{7,12} The duration of hospitalization was 14 days. Oludiran and Okonofua found the duration of hospitalization at first admission to range between seven to 163 days. The economic consequences of septic induced abortion have been highlighted by Konje *et al* who found that the cost of treatment of unsafe abortion was four times that of patient's earnings in Ibadan, Nigeria.¹³

Diagnosis was a dilemma as the third physician had started empirical treatment for tuberculosis prior to presentation. At presentation the tools (ultrasound scan, plain abdominal radiograph and barium enema) used for diagnoses were all pointing towards large bowel involvement and were unremarkable. Clinicians should have a high index of suspicion for uterine perforation when patients present with abdominal or pelvic pain irrespective of the duration as the sonographic appearance of the uterus can be variable over time. Most studies have shown that ileal involvement is more common as in the index card.^{7-9,12} A definitive diagnosis was only made at laparotomy. Laparotomy has an enviable place in bowel injuries secondary to uterine perforation.

In conclusion, the patient, a grandmultipara, who should have been on contraception had an induced abortion with uterine perforation by a physician, diagnosis was missed by the first three managing physicians and had a long perforation laparotomy interval. Timely and appropriate management of complications can reduce morbidity and prevent mortality. The Nigerian female population requires continuous health education on widespread and effective use of contraception. Grandmultiparity

should be discouraged. Physicians need training and retraining on abortion techniques and management of abortion complications.

REFERENCES

1. Ikechebelu JI, Okoli CC. Morbidity and mortality following induced abortion in Nnewi, Nigeria. *Tropical doctor*. 2003; **33**: 170-172.
2. Sule-Odu AO, Olatunji AO, Akindele RA. Complicated induced abortion in Sagamu, Nigeria. *J Obstet Gynaecol*. 2002; **22**: 58-61.
3. World Health Organisation. Abortion: A Tabulation of Available Data on the Frequency and Mortality of Unsafe Abortion. Geneva: WHO, 1990.
4. Oludiran OO, Okonofua FE. Morbidity and mortality from bowel injury secondary to induced abortion. *Afr J Reprod Health*. 2003; **7**: 7-12.
5. Adetoro OO, Barbarinsa AB, Sotiloye OS. Socio-cultural factors in adolescent septic illicit abortions in Ilorin, Nigeria. *Afr J Med Med Sci*. 1991; **20**: 149-53.
6. Ntia IO, Ekele BA. Bowel prolapse through perforated uterus following induced abortion. *West Afr J Med*. 2000; **19**: 209-11.
7. Dunner PS, Thomas MA, Ferreras M, Jerome M. Intrauterine incarcerated bowel following uterine perforation during an abortion: a case report. *Am J Obstet Gynecol*. 1983; **147**: 969-70.
8. McArdle CR, Goldberg RP, Rachlin WS. Intrauterine Small bowel entrapment and obstruction complicating suction abortion. *Gastrointest Radiol*. 1984; **9**: 239-40.
9. Etuk SJ, Ebong IF, Okonofua FE. Knowledge, Attitude and Practice of Private Medical Practitioners in Calabar towards Post-Abortion Care. *Afr J Repro Hlth*. 2003; **7**: pp 55-64.
10. Sule-Odu AO, Olatunji AO, Akindele RA. Complicated induced abortion in Sagamu, Nigeria. *J Obstet Gynaecol*. 2002; **22**: 58-61.
11. Leibner EC. Delayed presentation of uterine perforation. *Ann Emerg Med*. 1995; **26**: 643-6.
12. Konje JC, Obisesan KA, Ladipo OA. Health and economic consequences of septic induced abortion. *Int J Gynaecol Obstet*. 1992; **37**: 193-7.