Mzigaba, M. M., & Wella A. Yemeni J Med Sci. 2025; 19(4):47 -51
https://doi.org/10.20428/yjms.v19i4.2819
https://journals.ust.edu/index.php/yjms

OPEN ACCESS CASE REPORT

Uterine Perforation and Bowel Prolapse following an Unsafe Induced Abortion: A Case Report

Magafu Majura Mzigaba[1]*, Anold Wella[2]

[1] *Department of Obstetrics and Gynaecology, Songea Regional Referral Hospital, Ruvuma, Tanzania*
[2] *Department of Surgery, Songea Regional Referral Hospital, Ruvuma, Tanzania*

ABSTRACT

Background: Illegal induced abortion is a serious public health issue that poses significant risks to women's physical and emotional well-being.
Objective: This case report aimed to present a case of uterine perforation and bowel prolapse following an unsafe induced abortion.
Case Presentation: a case of 35 years old primigravida married-patient who had illegally induced abortion and referred to our hospital with a bowel prolapse through the vagina. Bowel resection with end-to-end anastomosis was performed. Due to the severity of uterine damage, a total hysterectomy was performed
Conclusion: Promoting reproductive health education and improving access to contraception in countries with restrictive abortion laws are crucial in preventing unintended pregnancies and unsafe abortions.

Keywords: Uterine Perforation, Bowel Prolapse, Induced Unsafe Abortion, Tanzania

**** Corresponding author address:*** *magafumajuramzigaba@gmail.com*

INTRODUCTION

Globally, the overall incidence of abortion is decreasing, but it is still increasing in low and middle-income countries (LMICs) (1). The World Health Organization (WHO) recognizes unsafe abortion as a significant public health issue. Although preventable, it remains a major cause of maternal mortality and morbidity (2). According to the WHO, a woman in LMICs dies every eight minutes due to complications of unsafe abortion (2). In LMICs, 55% of abortions are considered unsafe, while in high-income countries, only 3% of abortions fall into this category (1). Contributing factors include insufficient knowledge on reproductive health among women and men, poor socioeconomic conditions, restrictive abortion laws, and inadequate access to contraceptives (2,3).

Unsafe induced abortion is practiced worldwide; however, developing countries face higher rates of complications. Although prevalence of unsafe induced abortion in the general population is challenging to determine, due to underreporting, induced abortions accounted for 1% of all pregnancy losses in Tanzania (4). Majority of these induced abortions were reported in Dar es Salaam, with other regions including Ruvuma reporting significant rates (4).

Induced abortion, when carried out by untrained individuals, without adequate medical supervision or in an unsanitary environment, risks complications that can range from severe hemorrhage and infection to damage of adjacent organs, with potentially life-threatening consequences (5-7).

Given these statistics, it is critical to examine real-world cases of unsafe abortion and their consequences. Here, we present a rare case of bowel prolapse per vulva due to clandestine abortion. To the best of our knowledge this type of cases has never been presented before in our setting.

CASE PRESENTATION

A 35-year-old married woman was referred to our hospital from a peripheral health center with complaints of a mass hanging through her vagina for one day, heavy vaginal bleeding, and abdominal pain. Gravida 6, para 5, with three living children, all of whom were born at term via spontaneous vaginal delivery. She had a history of amenorrhea for two months, with an uncertain last menstrual period. She reported to have induced abortion by a primary health practitioner at a neighboring dispensary, where she was promised that the procedure would be performed under anesthesia, but this was not the case. During the procedure, the inducer used metal devices inserted into the vagina, and she experienced severe abdominal pain and noted significant amount of per vaginal bleeding. Shortly after, she noticed a prolapsed mass through the vagina and decided to seek further management at a nearby health center, where she was referred to our facility.

She denied any history of syncope, loss of consciousness, dyspnea, or urinary symptoms. She is neither diabetic nor hypertensive, and there are no family members with such history. She does not consume alcohol or smoke cigarettes.

On examination, she had a good nutritional status but was moderately pale. She was not jaundiced, dyspnoeic or febrile. She had neither lower limb oedema nor lympadenopathy. The (respiratory rate) RR was 18 breaths/minute and chest movements were symmetrical, trachea was centrally located, and she had normal vesicular breathing sound with no added sound. The pulse rate (PR) was 79 b/min, regular with good volume, the blood pressure (BP) was 100/65 mmHg, no murmurs or added sound were heard on auscultation. The abdomen was not distended, moved with respiration, soft, and liver and spleen were not palpable. Renal angles were free of tenderness. She had muscle guarding on deep palpation with rebound tenderness. She also had suprapubic tenderness. Pelvic examination revealed a normal vulva and urethral meatus. Approximately 50 cm of gangrenous, dry small intestine was prolapsed through the vaginal introitus. The perineum was soaked with blood. Through digital examination, the intestines were noted to hang outside via the cervical os. Vaginal wall was health.

The final diagnosis reached was perforated uterus and bowel injury (small intestine) secondary to induced abortion.

Exploratory laparotomy was performed which confirmed the perforation of the uterus at the posterior aspect with a hole of about 2 cm, small intestine invaginated through it to the introitus; uterus was bulky/boggy with signs of infection. Bloody fluid of about 300 mL was observed in the peritoneum. Large bowel/rectum was intact, and liver and spleen were also intact. The fallopian tubes and ovaries were normal. Resection of small intestine

of about 60 cm followed by end to end anastomosis using silk No. 2/0 was done. This was followed by TAH and RSO. After she recovered from anaesthesia, she was sent to gynaecological ward to continue with intravenous then oral antibiotics. The Sutures were removed on postoperative day 10, and the patient was discharged in good condition. The patient was followed up at the gynaecological clinic and was discharged from the clinic after complete healing.

DISCUSSION & LITERATURE REVIEW

Bowel injury resulting from uterine perforation is a rare and serious complication observed in illegally induced abortions. Symptoms typically involve the protrusion of bowel outside the female genitalia, although incarcerated small bowel within the perforated uterus can also occur. A multidisciplinary treatment approach, including explorative laparotomy, is recommended for accurate diagnosis and effective treatment (5,6).

Unplanned pregnancies resulting from sexual activity within marital or couple relationships are prevalent among women with diverse sociodemographic backgrounds and varied reproductive histories. A study conducted in Nigeria investigated a cohort of 8 women, aged 18 to 39 years, who presented with bowel injury. The termination gestational age ranged from 8 to 12 weeks, with 3 cases at 8 weeks, 2 cases at 10 weeks, and 1 case at twelve weeks. Notably, only 2 patients sought prompt medical attention within 24 hours of termination. Prolapse was identified in 7 patients by referring physicians, while 1 patient experienced prolapse during the evacuation procedure (8).

Some women resort to self-induced abortions, often resulting in incomplete abortion and subsequent complications requiring medical intervention (6). In some cases, these abortions can result in sepsis and other complications (5,7). While some abortions are facilitated by male partners, many are performed by women themselves without involving their partners like in our case. To mitigate these risks, educating couples about contraceptive use during reproductive and child health (RCH) visits can help reduce the incidence of such abortions.

In one study, Jhobta et al analyzed 11 patients with bowel injury and found that most of them were young, married, and from lower socio-economic classes in rural areas (6). The study revealed that the incidence of legal abortions was 6.1 per 1000 pregnancies, while illegal abortions accounted for 13.5 per 1000 pregnancies (6). Some of the reported high-risk factors for uterine perforations include previous cone biopsy, advanced age, nulliparity, menopause, gonadotrophin-releasing hormone agonist use, markedly retroverted uterus, undue force, and stenotic cervix (9).

In 2012, approximately 7 million women in developing countries were hospitalized due to complications from unsafe abortions, with 0.05% to 19% resulting in uterine perforations. Factors contributing to the risk include the surgeon's experience (the most influential factor), advanced maternal age, multiparity, history of previous abortions, and lack of sonography utilization (3). Although abortion has been legalized in India since 1972, women in remote areas still face limited accessibility (5,6). It has been reported that 70% of abortions are performed outside of healthcare facilities (5).

In countries with legalized abortion, voluntary procedures are performed in health facilities. However, in countries where abortion is illegal, including Tanzania, unsafe methods are used. These unsafe procedures can lead to severe complications like uterine perforation and, rarely, bowel injury/incarceration. Due to restrictive abortion laws in Tanzania, most unwanted pregnancies result in illegally induced abortions performed in unsterile environments by unqualified personnel. This significantly increases the risk of complications, including sepsis and fatalities (10).

Untreated complications arising from unsafe abortions, such as uterine perforation, bleeding, sepsis, and shock, can result in fatalities (2). In our case, the patient sought medical attention at a tertiary health facility one day after experiencing these complications, including uterine perforation with bowel prolapse, hemorrhage, sepsis, vaginal discharge, pain, abdominal cramps, fever, and shock. In other cases patients may also experience adhesions, partial or complete obstruction with or without distension, vomiting, diarrhea, or absence of bowel movements. Without proper treatment, these complications can lead to death. Furthermore, long-term complications, such as chronic pelvic inflammatory disease, dyspareunia, dysmenorrhea, and secondary infertility, can develop (2).

Bowel prolapse is a life-threatening emergency requiring prompt surgical intervention (5) thus timely diagnosis and management are crucial and can be lifesaving (5). Uterine perforation can be suspected if there is a sudden loss of resistance during the procedure. Ultrasound imaging can reveal a defect in the uterine wall, while a computed tomography scan can assist in identifying bowel loops within the endometrial cavity, particularly when the ultrasound results are inconclusive (5). The most frequently affected segments of the bowel are the ileum and sigmoid colon, likely due to their relatively fixed positions (3,9).

Surgical intervention is the primary management approach, with resectioning and anastomosis being commonly performed, particularly when the ileum is affected. In certain cases, uterine perforation may be repaired, while other cases may require hysterectomy, resulting in minimal long-term complications.

CONCLUSION

Unsafe abortion poses a substantial burden on both societal and public health fronts, particularly in low- and middle-income countries (LMICs), where it remains a significant contributor to maternal mortality and morbidity. Within our specific context, the procedure is often performed by untrained individuals. To address this issue, it is crucial to prioritize comprehensive health education initiatives and raise awareness regarding various contraceptive methods. These efforts aim to prevent unwanted abortions, especially in countries such as Tanzania, where abortion remains illegal. In the case of our patient residing in a rural area, the factors influencing her decision to undergo an unsafe abortion were unclear. However, it is possible that limited knowledge and access to contraceptives contributed to the occurrence of the unwanted pregnancy.

Recommendations

1. Comprehensive reproductive health education, along with improved access to contraceptive methods, is essential to reduce the incidence of unsafe abortions. This to a large extent will reduce the rate of illegally induced abortion.
2. Training healthcare personnel on female reproductive anatomy is crucial to preventing such complications. This case shows that this health care provider has had low knowledge on female reproductive anatomy as pulled out a large part of small intestine probably thinking is part of products of conception.
3. Much effort should be directed at reducing the incidence of unwanted pregnancy by better information on contraception and better health education programs.

Acknowledgment

The author would like to thank the health facility for allowing using this data for academic purposes.

Funding Information

This study did not receive any fund from any source.

Conflict of Interest

None declared.

Ethical Statement

Ethical approval (AFY/C.46/9) was obtained from the Songea Regional Referral Hospital Research Committee.

Consent

Consent to publish this report was sought from the patient and hospital administration.

REFERENCES

[1] Cunningham F, Kenneth JL, Steven LB, John CH, Larry CG, and Katherine DW. Williams Obstetrics 22nd Ed. 2005;241 - 247. United States of America, McGraw Hill Company.

[2] Carlson BS, Leopold NA, and Flu FA. Clandestine abortion causing uterine perforation and bowel infarction in a rural area: a case report and brief review. BMC Research Notes 2016; 9(98): 10 - 15.

[3] Tark D, Rachid J, Anas D, Abdelali M, Yassin K, and Mohammed B. First case report of uterine perforation and bowel incarceration following a clandestine abortion in Morocco. Journal of Surgical Case Reports 2022;5:1 - 3.

[4] Ministry of Health (MoH) [Tanzania Mainland], Ministry of Health (MoH)

[Zanzibar], National Bureau of Statistics (NBS), Office of the Chief Government Statistician (OCGS), and ICF. 2023. Tanzania Demographic and Health Survey and Malaria Indicator Survey 2023 Summary Report. Dodoma, Tanzania, and Rockville, Maryland, USA: MoH, MoH, NBS, OCGS, and ICF.

[5] Huei MC, Ching JS, Cheng YL, and Eing MT. Uterine perforation and bowel incarceration following surgical abortion during the first trimester. Taiwan Journal of Obstetrics and Gynaecology 2008;47(4): 448 - 451.

[6] Jhobta SR, Attri AK, and Jhobta A. Bowel injury following induced abortion. International Journal of Obstetrics and Gynaecology 2007;96: 24 - 27.

[7] Samantray SR, Mohapatra I. Small Bowel Prolapse a Rare Complication Following Unsafe Abortion. Cureus. 2020 Oct 30;12(10):e11260. doi: 10.7759/cureus.11260. PMID: 33274137; PMCID: PMC7707891.

[8] Oludiran OO, Okonofua FE. Morbidity and mortality from bowel injury secondary to induced abortion. Afr J Reprod Health. 2003 Dec;7(3):65-8. PMID: 15055148.

[9] Lebeau R, Guié P, Bohoussou É, Akpa-Bédi ÉS, Loukou Y, Kouassi JC, Anongba S. An uncommon complication of unsafe induced abortion: bowel prolapse through uterine perforation. Gynecol Obstet Fertil. 2013 Mar;41(3):193-5. Epub 2012 Jan 31. PMID: 22301199.

[10] Mabula JB, Chalya PL, Mchembe MD, Kihunrwa A, Massinde A, Chandika AB, Gilyoma JM. Bowel perforation secondary to illegally induced abortion: a tertiary hospital experience in Tanzania. World J Emerg Surg. 2012 Sep 1;7(1):29. doi: 10.1186/1749-7922-7-29. PMID: 22938178; PMCID: PMC3483243.