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Case Report

Obstetrics and Gynaecology Section

Uterine Gangrene and Mechanical Intestinal Obstruction in a Teenager Following Unsafe Abortion

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ABSTRACT

Unsafe abortion often leads to complications since it is carried out by untrained persons in an unsafe environment. The most common complications are anaemia, bowel injury, bladder injury, uterine perforation, and sepsis. Here, authors present a very unfortunate case of 18-year-old single nulliparous secondary school student who had self-induced abortion at 24 weeks gestational age with unusual complication of complete uterine gangrene and mechanical intestinal obstruction. Her recovery was prolonged but was managed successfully.

Keywords: Gestational age, Hysterectomy, Hysterotomy

CASE REPORT

An 18-year-old female was referred to the present hospital from primary care hospitals with a two day history of worsening colicky abdominal pain, abdominal distention, vomiting and constipation.

Her problem started a week prior to her presentation when she developed severe abdominal pain and profuse vaginal bleeding following ingestion of medications obtained from local drug store for the termination of her unwanted 24 weeks pregnancy.

She was immediately taken to the referred private hospital by the parents where urgent abdominal ultrasound scan confirmed intrauterine fetal death; probably due to abruption of the placenta. She was immediately offered cesarean hysterotomy to evacuate the uterine content and also was transfused with two units of blood. Five days later (post-surgery), she developed colicky abdominal pain, abdominal distention and vomiting. After this she was referred to the present hospital.

On presentation she was febrile (39.1°C), not pale (with Haemoglobin concentration of 13.1 g/dL) and dehydrated. Her vital signs were deranged (pulse rate: 102 beats per minute, respiratory rate: 26 cycles per minute, blood pressure 90 mmHg/42 mmHg). The abdomen was distended and a pfannenstiel incision was noted. The incision loosely closed with nylon 2/0 suture, was foul smelling with purulent discharge. The abdomen was tender and hyperactive bowel sound was heard. The vagina drains copious offensive purulent discharge.

Plain abdominal radiograph was suggestive of small intestinal obstruction. Total white blood cell count was 13,700 and wound swab microscopy, culture and sensitivity were done. Findings from other investigation were unremarkable.

Resuscitation and conservative management involving intravenous fluid, antibiotics (impenim and metronidazole), nasogastric intubation, and urethral catheterization with size 14 Foleys catheter, were immediately commenced.

Explorative laparotomy was done after failure of conservative management of intestinal obstruction. Access was gained through subumbilical midline incision under general anaesthesia. Intrabdominal findings include distended jejunum and proximal ileum, collapsed caecum, kinked distal ileum attached to a fibrous band at the lower segment of the uterus (which was bulky and appears unhealthy) and about 500 mL of purulent exudate was within the cavity. The affected segment of the ileum was untwisted with the aid of warm mops. These were followed with copious warm saline intra-abdominal lavage and abdominal closure. Daily wound dressing with saline was done. Meanwhile, the gynaecologists were involved and also saw the unhealthy uterus.

On the second postoperative day, there was some discharge flatus and watery stool. She was then commenced on oral feed which was tolerated. The seventh day saw a complete breakdown of the pfannisteal incision wound and the adjoining part of the midline infra-umbilical wound. The stitches were then removed and daily wound dressing with normal saline was commenced. The patient was stable and the edges of the wound granulating well. On the day ten, dry gangrenous proximal 2/3rd of the uterus was sighted from the open wound [Table/Fig-1]. The gynaecologist planned to re-explore for possible abdominal total hysterectomy. However, after close consensus with the general surgeons, a bedside debridement with the removal of gangrenous segment of the uterus was offered to her [Table/Fig-2]. She did well, wound dressing was continued. The wound later healed by secondary intention and she was discharged on the thirty first postoperative day. While in the hospital, the clinical psychologist was involved in the management. She was doing well and visits the clinical psychologist for continuing her psychotherapy. As per the author's declaration informed consent was obtained from

[Table/Fig-1]: Gangrenous uterus sighted from abdominal wound.

[Table/Fig-2]: Debridement of gangrenous segment of uterus.

the patient involved in the study.

DISCUSSION

The age of the patient is within the age range most frequently at risk of unsafe abortion [1]. It is widely reported that adolescents are more at risk of unwanted pregnancy than any age group since significant proportion of them are single and are easily influenced by peers [2]. They are at their peak of experimentation; wanting to practice things they heard from peers at school or on media without properly assessing the risks [3]. They have little knowledge of reproductive health to enable them make wise decision [4]. Also, at this age, majority of them are still in school, unempowered and unemployed, lacking the necessary financial autonomy and courage to practice safe sex despite its awareness. They are often taking advantage of by others for financial inducement, sexual coercive decision making or outright rape [5]. Most of them do not know their undeniable right to safe sex. It is reported that the rate of contraceptive use by this population remain persistently low over many decades [6].

When they eventually have unwanted pregnancy, they lack the courage and freedom to take the right decision [7]. Some of course may not detect the pregnancy early like our patient, partly because of the irregularity of their menstrual cycle at this period. They lack the freedom to make the right and informed choice because of their sole dependence on their parents [7]. As it was the case in the present index patient, she could only afford medicine procured from drug store without considering whether it was safe for her or not. In Nigeria, abortion Law is still restricted, therefore adolescents are regarded as minors and would not walk into the hospitals requesting for abortion without the company of an adult [8]. In most cases they consequently tend to resort to self medication or patronise the services of untrained personnel. The former is possible in the developing world where drugs are poorly regulated [9].

The present patient presented to the hospital late and with complications. This is often the case; many studies outlined reasons such as the need to sustain secrecy and financial constraints as the determinants of delay. Empirical studies observed that most of adolescent who had unsafe abortion only present to hospital for post abortion care when complications are severe. The present patient had severe anaemia as a result of profuse bleeding, this called the attention of her parent who took her to the hospital. The delay also resulted in intrauterine infection and pelvic sepsis. These complications are the frequently encountered post abortion especially when performed unsafely [10,11].

Gangrenous uterus and mechanical intestinal obstruction due to ileal kink are rare complications. The intestine was not traumatised as often, until and unless the uterine content is curetted overzealously by untrained hands [12-14]. The most frequently involved portion of the bowel is the terminal ileum followed by the colon [13]. As seen in the present patient, the distal segment of the ileum was involved; it got kinked on the anterior aspect of the uterus around a fibrous band. Instead of the usual perforation often reported or early postoperative ileus often associated with intra-abdominal surgeries, in the present patient there was classical mechanical intestinal obstruction [13,14]. Isolated gangrenous uterus following unsafe abortion is more common than intestinal involvement alone or both [15]. Infection is reported as the main cause of uterine gangrene and it is common in developing countries where aseptic procedures are not considered while carrying out the procedure [16]. In the present patient the progression of the infection despite the uses of escalated antibiotics showed that the uterine content was already infected before the hysterotomy was carried out, in the primary care hospital.

Post abortion care should emphasise proper counseling of the patient by well trained personnel especially in regards to the use of contraceptives [17]. In this case however, the psychotherapists were involved early in the management because of the emotional impact of both the unfortunate complications and hysterectomy due to complete gangrene.

CONCLUSION

In the areas where abortion law is restricted there is underreporting of unsafe termination of pregnancies, late presentation to the hospital and severe post abortion complications which often result in high morbidity and mortality. Therefore there is urgent need to introduce reproductive health in secondary school curriculum and ensure availability and easy accessibility of safe methods of preventing unwanted pregnancy.

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