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Case Report

Unusual Case of Acute Non-Puerperal Uterine Inversion in Rural Kenya: A Diagnostic Dilemma

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Abstract

Introduction: Acutenon-puerperal inversion of the uterus is very rare and without a high index of suspicion, severe complications are possible.
Case Presentation: This study reports the case of a woman with an asymptomatic fibroid who presented in shock with a vaginal mass and bleeding. The mass was a uterine leiomyoma complicated with uterine inversion. She recovered well from an emergency total hysterectomy and bilateral salpingectomy.
Conclusion: A high index of suspicion and immediate intervention are key points for all women presenting with a vaginal mass and vaginal bleeding.

Keywords: Vaginal Mass, Uterine Inversion, Uterineprolapse, Leiomyoma, Fibroid

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1. Introduction

Acute non-puerperal inversion of the uterus is uncommon and usually associated with the extrusion of a submucosal or endometrial polyp (1). From 1940s, only about 60 cases have been reported in the literature worldwide. Prolapse and fibroids extrusion, especially fundal submucosal forms, tend to be the commonest cause of this condition. Other less common causes are polyps and malignancies (2). Its gold standard treatment is surgery,with an abdominal, vaginal or combined abdominal-vaginal approach that is ideal for fertility preservation. Two techniques for either approach have been described, namely, Huntington's or Haultain's and Spinells or Kystners for abdominal and vaginal approaches, respectively (2, 3). This study presented an extremely rare case of a woman with uterine inversion due to a submucosal fibroid with uterine necrosis. A total hysterectomy and bilateral salpingectomy were performed for patient recovery.

2. Case Presentation

A 47-year-old para 3+0 with her last delivery 17 years ago and no history of amenorrhea presented to a level III hospital (without access to ultrasound services, a medical officer, or a gynecologist) with complaints of a vaginal mass, profuse bleeding, and severe pain (Likert scale of 9) following extraneous activity for two hours. There was no history of previous pelvic masses, abnormal uterine bleeding, dyspareunia, or pelvic pressure symptoms. The diagnosis of the second stage of labor was made because the fibroid looked like a fetal head. Several unsuccessful maneuvers were performed, and the patient was finally referred to our unit in an IV-level hospital for further management. On admission, the patient was restless with severe pain tachycardic (heart rate 126 beats per minute), hypotensive (blood pressure 80/50 MmHg) and had a moderate pallor of the mucous membranes. In the vaginal examination, a 10 by 15 cm massprotruded from the vagina with patchy white flakes and easy bleeding on the touch. As shown in Figure 1, the mass filled the vagina so completely that there was no room for maneuvering, and the cervix was tightly wrapped around it with no stalk-like extension. A Foley's urethral catheter was inserted successfully, and about 650 ml of clear urine was drained. While the digital rectal examination was unremarkable, an emergency pelvic ultrasound scan revealed a uterine mass, possibly a leiomyoma, and an accidentally dislodged intrauterine contraceptive device (IUCD). Accordingly, an emergency

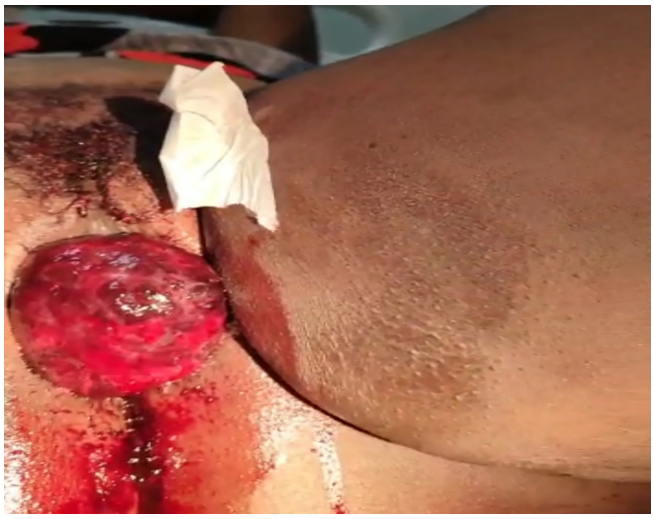

Figure 1: The figure shows an unusual case of acute non puerperal uterine inversion prior to surgery.

examination was performed under anesthesia, and then an exploratory laparotomy was performed. Malignancy was considered due to the bleeding, but the biopsy was not immediately taken due to the lack of cryo section services. A vaginal-abdominal approach was used due to the size of the fibroid that could not be repositioned. In addition to removing the IUCD and leiomyoma through the vagina, the uterus was stretched ventrally with forceps Alice, and the entire uterus was removed along with bilateral salpingectomy due to excessive necrosis. The patient had an uneventful postoperative period and was discharged three days after surgery. Appropriate samples were taken for histology, which indicated the presence of myoma.

3. Discussion

Uterine inversion is quite rare, but if not diagnosed and managed in time, it poses serious health risks (4). So far, two types of uterine inversions have been described, including puerperal and non-puerperal uterine inversion. The latter is also known as "obstetric inversion," while the latter is also called "gynecologic inversion" (5). Non-puerperal uterine inversion is also described by several authorities as acute or chronic, depending on the onset and evolution (5). While the acute form tends to be more severe (characterized by intense pain and bleeding), the chronic type has an insidious manifestation (commonly characterized by pelvic discomfort, vaginal discharge, irregular vaginal bleeding, and anemia) (6).

Although both are rare, the non-puerperal form of inversion has an extremely rare occurrence worldwide (7); thus, a large prolapsed fibroid should always be suspected. The case in this study was a woman with an asymptomatic fibroid who presented in shock with a vaginal mass and bleeding. It is not uncommon for non-puerperal inversion cases to be misdiagnosed. As an example, in the present case which was diagnosed as having the second stage of labor (since the fibroid appeared to be like a fetal head) and unsuccessful attempts at delivering the fetus before referral, it is possible to prevent any serious complications with a high index of suspicion and immediate patient workup. In most cases of non-puerperal uterine inversion, laparoscopy should be used to differentiate between uterine prolapse and polyextrusion for a definitive diagnosis. A biopsyis also recommended due to the possibility of malignancy. Due to the difficulty of vaginal repair, a total abdominal hysterectomy with careful localization of the distal ureter is a key point in patient management. Thus, women with large submucosal fibroids should have a myomectomy to prevent inversion.

4. Conclusion

Acute non-puerperal uterine inversion is rare, and a large prolapsed fibroid should always be suspected. A high index of suspicion and immediate intervention are key points for all women presenting with a vaginal mass and vaginal bleeding.

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Conflict of Interest: None declared.

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