

Ultrasound in Detection of Uterine Perforation in Surgical Abortion: A Case Report

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Abstract

Case Report

Uterine perforation is uncommon but potentially serious complication of surgical abortion that can be identified through ultrasound. We report the case of a 28yo women whit uterine perforation after a surgical abortion at 8 weeks' gestation via ultrasound.

Keywords: Uterine perforation, ultrasound, surgical abortion.

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INTRODUCTION

Uterine perforation is a rare but a dangerous complication of surgical abortion with a worldwide incidence rate of up to 0.4% of surgical abortions [1].

Ultrasound is a modality of imaging that may improve the early detection of uterine perforations after surgical abortions, but it is unfortunately rarely used in developing countries contrary to CT and MRI [2].

CASE

We report a case of a 28yo women; with a history of surgical abortion three days ago at 8 weeks' gestation, the patient presented pelvic pain and metrorrhagia. The gynecologist referred her for suspicion of an intrauterine foreign body. An emergency ultrasound performed by our radiology team revealed a hyper-echoic band in the posterior fundus corresponding to pelvic fat herniated into the myometrial defect (Figure 1 and 2). Diagnosis of uterine rupture was made. The patient underwent surgery, which revealed a linear fundal defect measuring 2 cm.

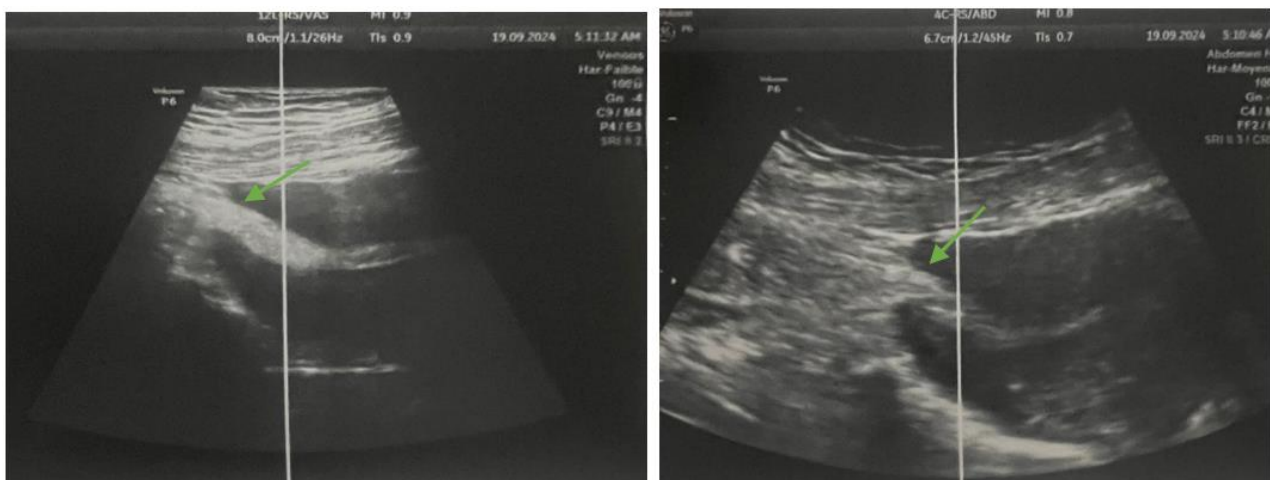


Figure 1 & 2: Midsagittal view: Defect in the posterior wall representing perforation with fat herniation (green arrow)

DISCUSSION

Ultrasound is an imaging technique that enhances the early diagnosis and detection of uterine perforations following surgical abortions.

However, while complications of abortion mostly occur in developing countries, ultrasound is rarely mentioned as a diagnostic method for identifying uterine perforation in these contexts [3].

Sonography is able to show the site of uterine rupture either directly by demonstrating a hypoechoic or anechoic transmural defect in myometrium that can extend to endometrium with the presence of extrauterine fluid in some cases [4]. Alternatively, it may be suggested by indirect findings such as the visualization of bowel loops or fat within the myometrial or endometrial cavity. Utilizing high-resolution transvaginal probes can improve the identification of perforation defects and mural hematomas [5].

In this case report, transabdominal ultrasound provided accurate results that aligned with the surgical findings. However, a limitation of transabdominal ultrasound is the requirement for sufficient urine in the bladder to act as an acoustic window. Additionally, image quality can be compromised in overweight or obese patients.

In conclusion, ultrasound is highly useful for the detection of uterine perforation resulting from

REFERENCES

1. Pridmore, B. R., & Chambers, D. G. (1999). Uterine perforation during surgical abortion: a review of diagnosis, management and prevention. *Australian and New Zealand journal of obstetrics and gynaecology*, 39(3), 349-353.
2. Wiafe, Y. A., Anyitey-Kokor, I., Agyei, B. A., Appiah-Kubi, A., & Owusu-Asubonteng, G. (2019). Sonographic Detection of Uterine Perforation in Surgical Abortions: Case Report From a Developing Country. *Medical Research Archives*, 7(6).
3. Singh, S., & Maddow-Zimet, I. (2016). Facility-based treatment for medical complications resulting from unsafe pregnancy termination in the developing world, 2012: a review of evidence from 26 countries. *BJOG: An International Journal of Obstetrics & Gynaecology*, 123(9), 1489-1498.
4. Gakhil, M. S., & Levy, H. M. (2009). Sonographic diagnosis of extruded fetal parts from uterine perforation in the retroperitoneal pelvis after termination of intrauterine pregnancy that were occult on magnetic resonance imaging. *Journal of Ultrasound in Medicine*, 28(12), 1723-1727.
5. Sherer, D. M., Gorelick, C., Gabbur, N., Borowski, D., Serur, E., Zinn, H. L., ... & Abulafia, O. (2007). Transvaginal sonographic findings of a large intramural uterine hematoma associated with iatrogenic injury sustained at termination of pregnancy. *Ultrasound in obstetrics & gynecology*, 30(1), 110-113.