Uterine rupture in the second trimester during medical termination of pregnancy for fetal abnormalities using misoprostol

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Objective

We report a patient who had uterine rupture at 22 weeks during medical termination of pregnancy for fetal abnormalities using misoprostol.

Methods

The case was managed at the University Hospital of Thessaly (Larisa, Greece).

Results

A 37-year-old G1 P0 woman was transferred to our hospital from a private sector clinic due to acute abdomen during medical termination of pregnancy. This was her second assisted reproduction technology (ART) attempt after a failed in vitro fertilisation (IVF) 4 years ago. She was diagnosed with endometriosis and subfertility 5 years ago after trying for 3 years to conceive. She had a laparoscopy where she had an endometrial cyst and a fibroid removed. The laparoscopy also showed left tubal obstruction. At the same time, she had a hysteroscopy and an endometrial polyp removed. No other medical problems were reported. During this second successful IVF she was diagnosed with twins, but her first trimester scan showed pentalogy of Cantrell on one of the fetuses. She had the fetus removed and continued as a single pregnancy. 20 weeks routine scan revealed anatomical fetal abnormalities and a decision was made at 22 weeks to terminate the pregnancy. She had received a total of 8 Cytotec pills orally (1600 mcg misoprostol) when she developed acute abdominal pain and tachycardia. She was transferred to our hospital where she presented to our emergency room pale and tachycardic with HR: 140/min, BP: 95/60mmHg, T: 37. 1 °C, R/R 18/min and SaO2 98%. The patient was awake and responded to our questions. On clinical examination the abdomen was hard, tender and sensitive. Fetal parts could be recognized on careful examination and the impression of uterine rupture was established. There was no external evidence of hemorrhage. The patient was supported with intravenous fluids, while medical and anesthetic backup was called for. The patient was cross-matched for blood, and standard hematological and biochemical investigations were requested. Her Hb was 4. 1g/dl. The ultrasound scan revealed hemoperitoneum with an embryo outside the uterine cavity and confirmed the diagnosis. The on-call gynaecology consultant arrived and made the decision to proceed to theatre for a laparotomy. Due to the patient having no children, she expressly wished to preserve her uterus At laparotomy, there was 4.4 I of blood within the abdominal cavity and the uterus was found to have a 4-cm rupture close to its left horn with the fetus in the abdomen. It seemed that the uterus was well contracted, and the bleeding was slightly self-contained. Gentle curettage through the rupture revealed some products of conception, that were removed. Hemostasis was achieved by over-sowing the rupture. The patient was transferred to the High Dependency Unit after receiving 6 units of blood and 4 units of fresh frozen plasma. One day later the woman returned to the ward and was discharged after 5 days. Follow up was arranged for 4 weeks time.

Conclusion

Misoprostol has been used for termination of pregnancy in different ways in the first and second trimester with or without mifepristone. Abortion-related morbidity and mortality increase significantly as pregnancy advances with a sharp rise in the rate of severe complications in induced abortion after 14 weeks of pregnancy. Uterine rupture with the use of misoprostol has been reported more frequently in women with uterine scars like in our case. The clinician dealing with second trimester terminations should be aware of the possibility of having a uterine rupture, especially in patients with a uterine scar in order to make an early diagnosis.