Invasive Mole Lead to Uterine Rupture, a Case Report

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Case Report

Keywords: Uterine rupture, Invasive mole

DOI: https://doi.org/10.21203/rs.3.rs-141430/v1

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Abstract

Uterine rupture common in scar uterus. In invasive mole lead to uterine rupture are rarely seen. A 31-year-old woman, in a clinic was abortioned. After abortion, the patient abdomen pained and litter vaginal bleeding fifty-three days ago. Then, the Human Chorionic Gonadotrophin(HCG) was rised and MR imaging showed a mass in myometrium. Suddenly, the uterine ruptured and shock. The patient was operated on for a hysterectomy of Gynaecologist. The pathological result is invasive mole.

Introduction

Uterine rupture,usually occurrence scarred uterus,Placenta issue through Scarred,grow out the uterine,flowing the infant enlargement,is easy lead to uterine rupture.It with an increased risk of maternal and perinatal morbidity and mortality\[^1\].As report uterine rupture incidence rate 0.5%-1%\[^2\].In China,the incidence rate of IMfollowing pregnancy is 0.94–1.30%\[^3–4\]. The incident of in invasive mole lead to uterine rupture are rarely seen. Invasive mole blengs to gestational trophoblastic neoplasia(GTN),it can invasive uterine myometrium or distant metastasis, The myometrial grape tissue can penetrate the uterine wall and cause massive hemorrhage in the abdominal cavity.There is a case about invasive mole lead to uterine rupture, through this case, let us provide relevant treatment experience and lessons in invasive mole in the future.

Case Report

A 31-year-old woman, She was induced abortion fifty-three days ago, she is primary pregnancy, had nothing symptom. For personal reasons, her need to abortion and the clinic not sent the issue examine. At the same time, she can not regular examine HCG, until abdomen pain and litter vaginal bleeding five days ago, she came into our hospital checked HCG in bloods, it rise to 106189mIU/ml and abdominal ultrasonography (US),discovery uterus large 98 × 95 × 106 mm and a mass in myometrium, size is about 12 × 8.0 cm. Chest X-ray examination: cardiopulmonary septum as usual. Pelvic MRimaging (Fig.1): the uterus large 100 × 96 × 105 mm,a mass in myometrium, the size of the tumor is about 12.3 × 8.0 cm,no invasive endometrium. And than, our checked the hysteroscopy: the endometrium is not normal, the blood vessels are thickened and the texture is disordered in endometrium. Uterus morphology: The uterine cavity was enlarged and the opening of bilateral fallopian tubes was visible.Consider GTN, the lesion is limited to the uterus, no distant metastasis. According the international Federation of Gynecology and Obstetrics(FIGO 2018 )staging and classification stage I(GTN), prognostic factor 8 scores. We are will plan to chemotherapy.

And then, suddenly, the painter Severe pain in the lower abdomen and whole abdominal distension and pain, vomited, blood pressure descend to 80/50 mmHg, HR63times/min. Physcial examine: Acute appearance, no obvious abnormalities in the heart and lungs. The whole abdominal muscles are tense, tenderness, rebound pain is obvious and there is no vaginal bleeding.Our judgement the uterine rupture and immediately surgical treatment. Intraoperative exploration revealed (Fig. 2): uterine rupture, intra-
abdominal blood and blood clots 2600 ml. Confirmed our preoperative diagnosis. The postoperative pathological results are shown in invasive mole (Fig. 3). Finally, the patient’s follow-up results after chemotherapy were normal.

**Discussion**

Invasive mole all come from hydatidiform mole, and most of them occur within half a year after the removal of mole. Patients may present with irregular vaginal bleeding, and HCG levels increase after hydatidiform mole treatment. May also be combined with extra-uterine metastatic lesions. The principle of treatment is comprehensive treatment with chemotherapy as the mainstay, surgery and radiotherapy as supplementary. Surgery is mainly used for adjuvant chemotherapy to control major bleeding, remove drug-resistant lesions, reduce tumor burden, and shorten the course of chemotherapy[5]. But for the treatment of lung metastases, systemic chemotherapy is the typical choice rather than surgery[6–7].

In this case, the patient age 31-year-old, who still had irregular bleeding in vagina after applying drug or induced abortion for fifty-three days. Serum HCG was determined to be greater than 10,6189mIU/ml, the characteristics of this case were clear GTN and the lesion is limited to the uterus, no distant metastasis. Most of GTN chemotherapy can be cured, chemotherapy is the first choice. Surgical treatment is no longer the main treatment for GTN. For special cases, drug-resistant and relapsed patients, local lesion resection is performed simultaneously with chemotherapy. However, for older people without fertility requirements, hysterectomy can be the first choice. Generally, surgical treatment is mainly used as adjuvant treatment. It plays a certain role in controlling various complications such as massive hemorrhage, eliminating drug-resistant lesions, reducing tumor load and shortening chemotherapy course, and is applied in some specific cases. For young women with fertility requirements, if the blood hCG level is not high, the drug-resistant focus is single and the extrauterine metastasis has been controlled, focus resection may be considered.

This patient has a fertility requirement, but HCG exceeding 10,000 mIU/ml, if her required excision of lesion, when was the best time? Though the B-ultrasound and pelvic MRI showed a 12 × 8 cm mass, invasion of the myometrium, no masses in the uterine cavity. Invades the huge mass of the myometrium, prone to complications of uterine rupture. According FIGO 2018, GTN guidelines, combined with patient requirements, if we early chemotherapy, and then surgery, keeping the chemotherapy after surgery or Surgical local excision of the lesion or intervention to prevent rupture bleeding, the patient maybe cannot occur uterine rupture. It is also possible that during chemotherapy, there will be uterine rupture and bleeding, and the uterus will still be lost. Can we also perform interventional therapy or radiotherapy combined with chemotherapy to reduce the activity of lesions before performing surgery? Because of we didn't try any of this, a bad ending happened.

Through this case, we summarize as follows: 1. After the abortion, the specimen should be sent for pathological examination, and HCG should be checked regularly until it is normal; 2. Abnormal vaginal bleeding needs to be checked in the hospital; 3. US and MRI indicate that the mass is larger than 5 cm,
that invasion of the muscle layer, hysterectomy should be performed. If there is a fertility requirement, remove the mass in the uterine cavity and invade the myometrium, and perform local mass resection. Chemotherapy can be performed for 2–3 courses or interventional or radiotherapy to control lesion activity before surgery; 4. If the mass invades the myometrium and reaches plasma When applying the membrane, be wary of uterine rupture and consider surgery before chemotherapy.

**List Of Abbreviations**

- Human Chorionic Gonadotrophin HCG
- Gestational trophoblastic neoplasia GTN
- Ultrasonography US
- International Federation of Gynecology and Obstetrics IFGO

**Declarations**

**Ethics approval and consent to participate:**

This case report was approved by the ethics committee of Zhuzhou Central Hospital and approved for publication. Ethics institution: Zhuzhou Central Hospital, Hunan Province, China, ethics number: 2020s1012.

**Consent for publication:**

**Availability of data and materials:**

Not applicable

**Competing interests:**

The authors declare that they have no competing interests

**Funding:**

No funding.

**Authors' contributions:**

ASW find patient information. QZ seek to imaging and pathology data. CT responsible for ethical approval. LC make imaging modify. YT Organize data and paper writing and publication.

**Acknowledgements:**
Not applicable.

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Figures
Figure 1

The uterus large 100×96×105mm, a mass in myometrium, the size of the tumor is about 12.3×8.0cm, no invasive endometrium.