Fever after Cervical Ectopic Pregnancy; a case report from Gorgan, Iran

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Abstract:
Ectopic pregnancy is a rare condition, and, although its prevalence has decreased in recent years, it is still an important cause of mortality and morbidity in women. Cervical ectopic pregnancy is less than 1% of all ectopic pregnancies. Fever is one of signs of infection, and it is necessary to monitor patients closely for other signs of infection. This paper presents and discusses a case of cervical ectopic pregnancy with fever after treatment. The patient had a high fever that became worse after three hospitalizations. The probable cause of her pyelonephritis was a urinary catheter, although it had been removed earlier, and she was receiving antibiotic therapy. Even though cervical ectopic pregnancy is a rare condition, it has certain complications that must be managed appropriately.

Keywords: fever, ectopic pregnancy, Gorgan

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1. Introduction

Ectopic pregnancy means the implantation of the blastocyst outside the uterine cavity (1, 2). It is a rare condition that is associated with only 1-2% of pregnancies (3-6). The most common site of implantation is in one of the fallopian tubes; implantation in other sites is rare (1, 7), with cervical ectopic pregnancy accounting for less than 1% of ectopic pregnancies (2). The prevalence of ectopic pregnancies has decreased, but they are still a cause of mortality and morbidity (3-5). Knowledge of this condition is important, because early diagnosis can provide better management and prevent maternal mortality. Herein, we discussed a woman with a cervical ectopic pregnancy and fever after surgical treatment. Informed consent was obtained from the patient for publication of this report.

2. Case presentation

A 36-year-old woman (G2P1L1) presented in her seventh week of gestation to Falsafi Hospital in Gorgan, a city in northern Iran, in December 2013 with spotting from the beginning of her pregnancy. Her vital signs were stable, and her only compliant was vaginal spotting. Her past medical history was unremarkable, although she had a cesarean section four years ago. She was admitted to the hospital, and a transvaginal ultrasound showed the cervical ectopic pregnancy at seven weeks of gestation. Her initial lab test results were in normal ranges. Her hemoglobin was 11 g/dl, and it did not change after the treatment. When she was admitted for the third time, she had leukosytosis (WBC=11000/cumm) and hypochromic anisocytosis anemia. Her serum level of beta-HCG was not significant. At the last admission, her WBC reached 24000/mm^3, but the renal and hepatic function tests were in normal ranges.

We chose surgical treatment for her. After general anesthesia, her bilateral urethral arteries were clamped at internal *os*. Pregnancy products were drained without bougies, and the uterine cavity was emptied completely. After removing the pregnancy tissue, our patient had massive bleeding, and we initiated blood transfusion and placed a two-way catheter in the cervix. Four hundred milligrams of misoprostol suppository was placed in her posterior cul-de-sac. After surgery, she was transferred to the Intensive Care Unit (ICU) and intravenous fluid and cefazolin were started. Later that day, we requested an ultrasound, which revealed no residue of pregnancy products. The urinary and cervical catheters were removed, and the patient was transferred to general ward and discharged after one day. Forty-eight hours later, the patient returned with a fever without any other symptoms. She was admitted, and a combination of an IV cephalosporin, clindamycin, and an amino glycoside was started. An ultrasound was performed, and it showed a 32 x 25 x 16mm hematoma in the endometrial cavity (near the scar of her past cesarean section (C/S).The serum level of beta HCG was not significant. After her fever had subsided for 48 hours, she was discharged. After one week she had a high fever again and no apparent physical condition.

Another ultrasound was performed, and it indicated that there was a hypoechoic lesion in the lower body, and the cervix had compressed the posterior wall of the bladder (compromised with hematoma). We started therapy with wide spectrum antibiotics, but she did not respond to the treatment, and her fever continued. At this time, the patient discharged herself and visited an infectious disease specialist who admitted her to another hospital. A gynecologist consult was asked from our gynecologist as her previous physician. We had performed a laparotomy because her workups did not indicate any apparent site of infection. The laparotomy indicated that her abdomen was clear. We only observed a bulge in the cervix and drained it through the skin. After the procedure, she received extensive antibiotic therapy for her partially-treated pyelonephritis. After 48 hours of antibiotic treatment, her fever subsided, and she was discharged from hospital in good health.

3. Discussion

Cervical ectopic pregnancy is rare and accounts for less than 1% of pregnancies (1). The etiology is unknown, but some factors, such as previous dilation and curettage, pelvic inflammatory disease, smoking, previous pelvic surgery, previous ectopic pregnancy, advanced age, previous cesarean section, invitro fertilization, and the use of intrauterine devices (IUDs) seem to be factors (1, 2, 5, 7, and 8). Our patient had no apparent medical history except for cesarean section, but it seems that a history of cesarean section has little, if any, role in cervical ectopic pregnancy.

The most common presenting symptom of ectopic pregnancy is vaginal bleeding (often painless in the first trimester) (1, 2, 4, and 8), and our patient presented with this symptom. Abdominal pain and hemodynamic instabilities have been observed in more severe cases (1). Management of ectopic pregnancy depends on the condition of the patient, the location and duration of the pregnancy, and includes surgical and medical treatments (1, 2, 5, and 6). We had to choose surgical treatment for our patient who had no major complications related to the first surgery. Complications after removing an ectopic pregnancy are mostly bleeding and surgery-related (1). Our patient had a high fever that relapsed after 3 times of hospitalizations, which could not be related to the complications of the surgery but due to subsequent pyelonephritis. The probable cause of her pyelonephritis was the urinary catheter, although we had removed it early, and she was receiving antibiotic therapy.

4. Conclusion

This paper reported a case of ectopic pregnancy complicated by pyelonephritis after the surgical management. Ectopic pregnancy is a rare condition, but its proper management and lessening of the potential complications are crucial. We suggest close monitoring and better follow up of such patients.

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Conflict of Interest:
There is no conflict of interest to be declared.

Authors' contributions:
Both authors contributed to this project and article equally. Both authors read and approved the final manuscript.

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