

## A Case of Emergency Cesarean Section with Pseudopregnancy

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ARTICLE INFO	ABSTRACT
<b>Article type:</b> Case report	<b>Background:</b> Pseudopregnancy is a physical state whereby all the signs and symptoms of pregnancy are exhibited with the exception of the presence of a fetus. The detection of a pseudopregnancy is significant; however, as it may be associated with all pregnancy symptoms, it is important to differentiate between the two.
<b>Article History:</b> Received: 16-Nov-2019 Accepted: 30-Aug-2019	<b>Case report:</b> We report a case of pseudopregnancy leading to an emergency cesarean section. A 28-year-old woman claiming a 7-month pregnancy was referred to a rural health center by her in-laws complaining of vaginal bleeding. The woman was referred to an urban hospital by emergency medical services with a diagnosis of placenta previa. In the hospital, she underwent an emergency cesarean section due to a severe deceleration of fetal heart rate (FHR), prior to assessing by an ultrasound. No fetus or signs of uterine or abdominal pregnancy was observed. Wrong auscultation of the maternal heart rate instead of FHR seemed to be the main error.
<b>Key words:</b> Pseudocyesis, Pseudopregnancy Cesarean Section Infertility	<b>Conclusion:</b> It is required to pay more attention to the methods of differentiation of FHR from maternal heart rate. This report highlighted the significance of early detection of pseudopregnancy.

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### Introduction

Pseudopregnancy is one of the most interesting issues for women in reproductive age or even close to menopause. It is the false belief of being pregnant associated with the objective signs of pregnancy. In addition, it is seldom a subject of professional debate due to its infrequency (1). It is a rare clinical disorder, and its exact prevalence rate is not known (2). Moreover, pseudopregnancy usually occurs in women with limited access to appropriate health care or under stress (3).

Women with a pseudopregnancy typically show the actual signs and symptoms of pregnancy (4). The usual scenario includes a woman referring to a general physician or midwife with a distended abdomen, morning sickness, weight gain, darkened areolae, and missed menstrual period (5). Many health care professionals can be deceived by the symptoms associated with a pseudopregnancy. Based on the literature, it is shown that 18% of women with a pseudopregnancy have been diagnosed

as pregnant by medical professionals at least for one occasion (6). Herein, we report a case of pseudopregnancy leading to an emergency cesarean section (C-section) with the detection of placenta previa and fetal distress.

### Case report

A 28-year-old married woman, complaining of vaginal bleeding starting since 3 h ago, was admitted to a rural health center in 2015. She claimed a 7-month pregnancy after 12 years of infertility. In addition, her in-laws claimed that she had regular visits with an obstetrician each month and took iron and multivitamin tablets; however, she always went for an examination alone. In response to the request of test results and pregnancy documents from the midwifery expert, the patient and her companions stated that they forgot to bring the documents after the observation of bleeding and emergency situation. Furthermore, due to the distance from the center, it is not possible to return and bring pregnancy documents (Figure 1: Referral form).

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After the primary evaluation of the patient by the midwife, based on the size of the abdomen and its position relative to the navel, pregnancy was diagnosed for the patient at about 30 weeks.

The vital signs, including a blood pressure of 110/70, pulse rate of 80 beats/min, and fetal heart rate (FHR) of 110 beats/min, were recorded in the patient assessment sheet by the midwifery expert (Figure 2: Medical history and physical examination sheet). Due to no observation of uterine contractions, the midwife suspected placenta previa; therefore, she refrained from digital vaginal examination and used only a speculum examination. The cervix was open, and the amount of bleeding was less than menstruation.

Considering the observation of bleeding and claim of pregnancy after 12 years of infertility and despite the lack of tests and documentation, the midwife decided to refer the patient to an urban hospital. At the maternity ward, after the presentation of the woman's history by a midwife to an on-call obstetrician through a phone call, routine orders were given to the midwife with the request for an emergency ultrasound to assess placenta location and cardiology consultation due to cardiac arrhythmia at 20:15. The FHR deceleration (less than 100/min) was detected at 20:25, and the woman was prepared for C-section based on the obstetrician diagnosis due to fetal distress.

Due to the inaccessibility to a radiologist in the hospital at that moment, she was transferred to the operating room prior to conducting an ultrasound. Internal consultation about the evaluation of cardiovascular status was also performed before anesthesia in the operating room revealing no problem. General anesthesia was carried out with isoflurane. After the skin incision and opening the abdominal fascia, no signs of pregnancy were observed. There were no signs of pregnancy in an 8-centimeter small uterus. Exploratory laparotomy was conducted for probably ectopic pregnancy (Figure 3: Anesthesia record).

After laparotomy, an abdominal ultrasound was performed in the operating room with a portable set and reported a small uterus with a 3 × 3 cm myoma. Severe ileus in the intestine was observed, and there was no visible evidence of free fluid in the abdomen and pelvis. Her

husband and relatives were informed by the supervisor. After providing the necessary considerations in the operation room, her empty uterus was shown to her husband, and the event was written by the security forces. On the recovery bed, after partial consciousness, the woman was shouting "baby, my baby!" At 22:00, she was delivered to the gynecologic surgical ward for postoperative care.

## Discussion

Today, the reports of a pseudopregnancy are lower than what is occurring due to the advances in diagnostic and medical technologies facilitating the earlier diagnosis. A pseudopregnancy is a psychological disorder manifesting when women display fear or need for being pregnant. It is believed that this psychological desire or depression stimulate high secretion of hormones from the pituitary gland, and mimicking pregnancy hormonal changes becomes true (6,7).

Conflict theory describes that the fear or desire for pregnancy causes internal conflict and resulting changes in the endocrine glands, such as clinical signs and symptoms and laboratory findings. The theory of wish fulfillment describes that minimal changes in the body lead to the formation of false beliefs in prone individuals. False Pregnancy Depression Theory states that depression may start following endocrine neurological changes caused by major depressive disorder. The evidence supports all the aforementioned theories. In this report, the woman had a history of infertility. According to traditional context and cultural beliefs in the importance of pregnancy and childbearing, a woman is faced with a lot of psychological pressure (8).

The cause of the enlarged abdomen in this case was reported after laparotomy indicating intestinal ileus. Based on the literature, it was shown that abdominal enlargement is due to the accumulation of excess fat, distension due to gas accumulation, and retention of feces, urine, and severe lumbar lordosis leading to displacing the abdominal viscera forward (9). The fear of vaginal examination in placenta previa causes the patient to avoid careful examination. The possibility of placenta previa recorded in the transferring form formed a chain of misinterpretations. In this case, an emergency C-

section was conducted without performing an ultrasound with a diagnosis of fetal distress. A similar situation has been reported in newspapers<sup>(10)</sup>.

In the present study, the FHR was heard and frequently recorded by the midwife and physician. It is highly likely that maternal tachycardia was assumed instead of FHR (120 beats/min) due to stress after the perceived risk of bleeding at the beginning of referring to the clinic. After visiting and ensuring about performing the appropriate medical intervention, the maternal heart rate decreased resulting in the detection of decreased FHR to 80 beats/min.

Even manual examinations could be inconclusive in some cases. In most reports on false pregnancy, there was no definitive method for the confirmation of pregnancy, and definitive proof of pregnancy is achieved only using an ultrasound<sup>(11)</sup>. In developed countries, women visit obstetricians in the first trimester of pregnancy. In addition, it is requested to carry out diagnosis assessment, including pregnancy tests and ultrasound examinations<sup>(7)</sup>.

## Conclusion

In this case, by Root cause analysis, the Swiss cheese model can be certainly cited for the occurrence and illustration of errors. Important holes in layers trending this error process included complete trust in patient's claims, lack of attention or evaluation of pregnancy definite evidence, diagnosis of placenta previa only by vaginal bleeding, wrong auscultation of maternal heart rate instead of FHR, and avoidance of an abdominal examination by the obstetrician. System deficiencies, such as the absence of an on-call radiologist to perform a timely ultrasound, are also considered other important sources of mistake.

In order to prevent the recurrence of similar cases, it is necessary to pay attention to the education of rare cases and share the experiences of the events that have formally and legally occurred in scientific centers and databases. It is also suggested to consider clinical examination the most important diagnostic tool and carry out the examination in accordance with the description of skill acquisition tasks in this field and its practical

application. Continuous training can be a good method to strengthen the skills of employees.

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## Conflicts of Interest

The authors declare no conflicts of interest.

## References

1. Uptodate 2019, available from <https://www.uptodate.com/contents/pseudocyesis>
2. Pirtovsek Sava A, Derganc M, Licina M. P-1477 - Pseudocyesis followed by delusions of maternity. *European Psychiatry*. 2012; 27: 1. [https://doi.org/10.1016/S0924-9338\(12\)75644-4](https://doi.org/10.1016/S0924-9338(12)75644-4)
3. Campos S, Link D. Pseudocyesis. *The Journal for Nurse Practitioners*. 2016; 12(6): 390-4.
4. Yadav T, Balhara YP, Kataria DK. Pseudocyesis Versus Delusion of Pregnancy: Differential Diagnoses to be kept in Mind. *Indian Journal of Psychological Medicine*. 2012; 34(1): 82-4. doi: 10.4103/0253-7176.96167
5. Gaskin IM. Has Pseudocyesis Become an Outmoded Diagnosis? *Birth* 2012; 39(1):77-9.
6. Talukder US. Pseudopregnancy .a case report. *International Journal of Women's Health Care*. 2017; 2(1):1-2.
7. Tarin JJ, Hermenegildo C, García-Pérez MA, Cano AJRB, Endocrinology. *Endocrinology and physiology of pseudocyesis*. 2013; 11(1): 39. doi: 10.1186/1477-7827-11-39
8. Seeman MV. Pseudocyesis, delusional pregnancy, and psychosis: The birth of a delusion. *World journal of clinical cases*. 2014; 2(8):338-44.
9. Bera SC, Sarkar S. Delusion of Pregnancy: A Systematic Review of 84 Cases in the Literature. *Indian Journal of Psychological Medicine*. 2015; 37(2):131-7.
10. Graff A, Brazilian doctor performs C-section on woman with a phantom pregnancy. December 17, 2013. Available from <https://blog.sfgate.com/sfmoms/2013/12/17/brazilian-doctor-performs-c-section-on-woman-with-a-phantom-pregnancy/>
11. Cunningham FG, Leveno KJ, Bloom SL, et al. *Williams Obstetrician*. 24th ed. New York: McGraw-Hill Medical; 2014.