

First-Trimester Missed Abortion: A Case Report

Birinci Trimesterde Missed Abortus: Olgu Sunumu

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ABSTRACT

According to World Health Organisation (WHO), spontaneous abortion generally occurs in 10% to 15% of clinically recognized pregnancies, although many spontaneous abortions occur before the woman recognises she is pregnant. Traditionally, treatment using surgical management which involves dilation and curettage and the manual vacuum aspiration of the product of conception is preferred for incomplete and missed abortion. Additionally, medical management with the use of prostogladin analogues such as misoprostol and dinoprostol with or without antiprogesterone (mifepristone) to expel the products of conception has also been in use. However, recently, the expectant management, defined as waiting for the foetus remains to be naturally expelled from the uterus, is being researched and experimented with more. In this case report, the case of a 35-year-old woman who experienced missed abortion during the 7th week of pregnancy is reported and the possible best management options is discussed.

Keywords: Expectant management; first trimester; missed abortion; pregnancy

ÖZ

Dünya Sağlık Örgütü'ne (WHO) göre, spontan abortus, genellikle klinik olarak tanınan gebeliklerin % 10 ile % 15'inde meydana gelir, ancak birçok spontan abortus, kadın gebe olduğunu fark etmeden önce gerçekleşir. Geleneksel olarak, tamamlanmamış ve missed abortuslar için dilatasyon/ kürtaj ve gebelik ürünlerinin manuel vakum aspirasyonu ile yapılan cerrahi tedavi tercih edilir.

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Ayrıca, gebelik ürünlerini atmak için misoprostol ve dinoprostol gibi prostogladin analoglarının, antiprogesteronla (mifepriston) veya antiprogesteron olmadan kullanımı da tıbbi tedavi de yer almaktadır. Ancak son zamanlarda fetüsün doğal olarak uterustan atılmasını beklemek olarak tanımlanan bekleme yönetimi, daha fazla araştırılmakta ve denenmektedir. Bu olgu sunumunda gebeliğinin 7. haftasında missed abortusu geçiren 35 yaşındaki bir kadın hastada olası en iyi tedavi seçenekleri tartışılmaktadır.

Anahtar Kelimeler: Bekleme tedavisi; birinci trimester; gebelik; missed abortus

INTRODUCTION

Abortion is the death and expulsion of the foetus from the uterus either spontaneously or by induction before the foetus is viable (more than 20 weeks/ more than 500g) (1). The specific number of weeks may vary from one country to another. According to World Health Organization (WHO), abortion generally occurs in 10% to 15% of pregnancies, but many spontaneous abortions occur before the woman realizes that she is pregnant (1,2). Abortion may be caused by embryonic/foetal, maternal, paternal and unknown factors. Genetic abnormalities account for 55% of all spontaneous abortion with the most common chromosomal defects being autosomal trisomies, polyploidy and monosomy X. Endocrine factors also play a role in spontaneous abortion where corpus luteum failure causes insufficient progesterone. Additionally, polycystic ovarian syndrome, uncontrolled diabetes and untreated thyroid diseases have been found to have a relation with spontaneous abortion (1).

Maternal illnesses and infections, for example, influenza, pyelitis, and malaria; congenital abnormalities of uterus, cervical incompetence, autoimmune diseases, thrombophilic effects and alloimmune diseases are some maternal factors as well. Paternal factors include teratospermia and oligospermia. Increased maternal age, alcohol use, heavy caffeine use, chronic maternal diseases, cigarette smoking,

cocaine use, conception within 3 to 6 months after delivery, intrauterine device use, medications, multiple previous elective abortions, previous spontaneous abortion, toxins have been found to be risk factors for spontaneous abortion as well (1,3).

The types of spontaneous abortion include the following. Threatened abortion (*abortus imminens*); this is the situation where the pregnancy is complicated by bleeding before the foetus is considered viable. This is characterised by fresh blood and pelvic pain. Fetal heart rate (FHR) is positive if the pregnancy is between the 8-10th week (4,5).

Inevitable abortion (*abortus incipiens*); it occurs when the cervix dilates (more than 3 cm) but the products of conception have not yet been passed. During ultrasonography, FHR is undetectable, endometrial integrity is disturbed. Beta human chorionic gonadotropin (B-HCG) is below normal for that week of pregnancy. Incomplete abortion; some but not all of the products of conception have passed. This is characterised by contractions and heavy bleeding. Complete abortion; it occurs when all the products of conception have passed without surgical or medical intervention. This is characterised by bleeding which reduces with time, and the pain stops which later on. Missed abortion; it is the death of the foetus without any uterine activity to expel the foetus. This is characterised by loss of pregnancy symptoms, reduced size of uterus, and reddish brown spotting. Pain is absent septic abortion; this is a spontaneous abortion complicated by uterine infection and is characterised by a temperature of 38 degrees or more. Recurrent spontaneous abortion; this the situation where the pregnancy has been lost 3 or more consecutive times (1,4,5).

In the management of abortion, surgical treatment which involves dilation and curettage (D&C) and manual vacuum aspiration is traditionally used. Medical management involves the use of prostaglandin analogues such as misoprostol and dinoprostol with or without antiprogesterone (mifepristone) to expel the products of conception. Yet there is the more modern expectant management which involves waiting for the foetus remains to be naturally expelled from the uterus (1,6).

The role of a midwife in abortion care involves taking records, providing bed rest, closely monitoring bleeding and vital signs, preparing the patients for D&C (stopping food intake), administering prescribed medication, preparation of blood for transfusion, providing information and emotional support for the patient (3,5).

Similar to the other managements for abortion, the midwife plays an essential role in the expectant management

of spontaneous abortion in addition to their basic roles. Particularly in the expectant management, there is a requirement for robust counselling, support for treatment, follow-up and support for grief (7). Especially in cases where the midwife is the primary caregiver, thorough counselling which includes why the expectant management has been indicated, what the advantages and the disadvantages of this management are, the success rate of this management, the option to opt out of this whenever the patient wants to, what will happen during this period (e.g. pain, bleeding, the expected size of the products of conception that will be passed etc), the availability of painkillers to manage pain during this period, and the signs of infection and haemorrhage to watch out for in order for the patient to make an informed decision is always necessary. Follow-up after 7-10 days and a pregnancy test three weeks after miscarriage to confirm a successful miscarriage should also be encouraged. As a provider of individualised care, the midwife also plays an important role in supporting grief based on the culture, religion and personal beliefs of the patient. What usually happens during the grieving season and how best to manage grief should be explained as well. This case report aims at deliberating how best to manage this case (1,4,5).

CASE

This case report was carried out according to the principles of the Declaration of Helsinki and voluntary consent was obtained from the patient for the obstetric history. A 35-year old patient, who was 7 weeks and 3 days pregnant based on her last menstruation date (01/09/2018), presented to the obstetrics and gynaecologic clinic with 7 weeks of amenorrhea after her last menstruation, fatigue, itchiness and brownish spotting. Her obstetric history was gravida 2 and para 1 (cesarean section).

Her vitals were found to be normal: temperature, pulse, respiration rate, blood pressure and oxygen saturation were measured as 36.4°C, 90 beats/min, 20 breaths/min, 100/70 mmHg, and 99% respectively. Upon physical examination and interrogation, it was discovered that symptoms of pregnancy in breasts were disappearing and that there was no pain. An ultrasound revealed a gestational sac with an intact foetus but without any foetal heartbeat. b-HCG less than 7650 mIU/ml but more than 1500 mIU/ml. Laboratory tests showed haemoglobin, haematocrit and leucocytes were 12.2 gr/dL, 37.8% and 315 respectively. Her blood type was O Rh+

After analysing the laboratory results, physical examination and ultrasound, she was diagnosed with missed

abortion and dilatation and curettage was decided as the treatment option.

DISCUSSION

A presentation of reddish brown spotting after 7 weeks of amenorrhoea has differential diagnoses to include implantation bleeding especially if the patient was on contraceptives, infection, abortion, ectopic pregnancy and molar pregnancy. A diagnosis of missed abortion was confirmed based on the absence of FHR and the presence of an intact foetus, although there were changes in the size of the uterus, amniotic cavity, and an intact embryo during ultrasound; and b HCG level lower than what corresponds to the level for 7 weeks in addition to physical examination findings. Infection was ruled out due to a normal temperature and the absence of signs of infection in the laboratory test results. Rh immunoglobulin administration was not necessary since the mother was Rh(D) positive (3, 8).

In the management of the various cases of abortion including missed abortion, prompt surgical evacuation has been the traditional management of choice due to the risk of infection and coagulation disorders and also the absence of ultrasonography until about 50 years ago (3). However, the surgical method is without its disadvantages. Surgical evacuation has been associated with complications including bleeding, infection, uterine and cervical perforation, bowel damage and decreased fertility. Considering these complications, with the availability of ultrasonography and antibiotics, successful outcomes for expectant and medical management and a significant percentage of failure of D&C, there is the question of whether surgical treatment should continue to be the first option of management, especially if the patient is in a stable condition (if there is no heavy bleeding, unacceptable pain or infection) (8).

Luisse et al. (2002) report 81% and 76% successful outcome for expectant management in all abortions and missed abortion respectively (5). Rafi et al. (2014) report 54% success rate for the expectant management and also reported that 74% of patients upon detailed counselling opted for the expectant method (4). Expectant treatment had an overall success rate of 92.5% based on 9 studies representing 545 pooled patients (8). It has been reported that women who were given the opportunity to choose their treatment had a better subsequent mental health indicating that if a complete spontaneous abortion should be safe, effective, acceptable to patients and available at the lowest cost and risk, then the expectant management should be the

first choice of treatment (3, 8, 9, 10). The case discussed here was stable without heavy bleeding, unacceptable pain or infections, therefore, the expectant management could be used upon detailed counselling, however, surgical management was the treatment of choice.

Although the Health Ministry recommends the use of expectant management especially for abortus imminens and incomplete abortion the normal practice in most hospitals is the use surgical management as first choice of treatment (11). Inadequate counselling on the expectant management of abortion, unwillingness to lose time and avoidance of any risks involved in this method are thought to be reasons for this situation.

CONCLUSION

The patient who had been diagnosed with missed abortion is in a stable condition. It is recommended that she be given detailed counselling about the expectant management and encouraged to choose it because it is effective, safer, and less costly.

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