Successful Term Pregnancy After Cesarean Scar Molar Pregnancy

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Abstract

Background: Cesarean scar molar pregnancy (CSMP) is an exceptionally rare clinical entity, combining two uncommon obstetric conditions: cesarean scar pregnancy and molar gestation. The diagnosis is often delayed due to nonspecific symptoms and misinterpretation of imaging findings, and there is limited data regarding fertility outcomes following such cases

Case Presentation: We report the case of a 32-year-old woman, gravida 2 para 1, who presented with vaginal bleeding and a diagnosis of missed abortion at 12 weeks gestation. Despite medical management with misoprostol, she experienced severe hemorrhage requiring surgical intervention. Intraoperative findings revealed thinning of the previous cesarean section scar and abnormal tissue suspicious for ectopic gestation. Pathologic examination confirmed a partial molar pregnancy implanted at the cesarean scar site. Following surgical repair and appropriate follow-up, including serial β -hCG monitoring until undetectable levels were reached, the patient conceived spontaneously two years later. The subsequent pregnancy progressed uneventfully to term and was delivered via cesarean section.

Conclusions: This case highlights the importance of considering CSMP in the differential diagnosis of atypical pregnancies in patients with a history of cesarean section, especially when imaging shows abnormal sac location or persistent bleeding. Early diagnosis and prompt management are crucial for patient safety and preserving fertility. To our knowledge, this is one of the rare reports of a successful term pregnancy following CSMP

Keywords: Molar pregnancy; Cesarean scar pregnancy; pregnancy outcome; complicated pregnancy

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Introduction

Gestational trophoblastic disease (GTD) occurring at ectopic sites represents an exceptionally rare condition [1], with some authorities estimating its incidence at approximately 1 case per 1,000,000 pregnancies [2, 3]. Diagnosis is typically established through invasive surgical intervention, with only rare instances of accurate prenatal identification via transvaginal ultrasound (TVUS) or magnetic resonance imaging (MRI) [B-MRI].

Pregnancy implanted in a cesarean scar constitutes another uncommon obstetric pathology. Cesarean scar molar pregnancy (CSMP) represents an even more infrequent variant. The literature contains no documented cases of successful pregnancies following CSMP. However, prompt diagnosis and appropriate management of CSMP are crucial, as they not only preserve patient health but may also enable future successful pregnancies.

We present a case of successful term pregnancy following prior CSMP (initially diagnosed during surgical exploration for uncontrolled vaginal bleeding).

Case History

A 32-year-old woman, gravida 2 para 1, was referred to our obstetrics clinic (Yas Hospital, Tehran University of Medical Sciences, Tehran, Iran) four years ago for a suspected miscarriage. She had an uneventful first pregnancy two years earlier, which

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Copyright © 2025 Tehran University of Medical Sciences. Published by Tehran University of Medical Sciences This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International license(https://creativecommons.org/licenses/by-nc/4.0/). Noncommercial uses of the work are permitted, provided the original work is properly cited. was terminated by cesarean section (CS) due to her maternal request. The patient reported new vaginal bleeding after secondary amenorrhea following a natural conception trial. The calculated gestational age was 12 weeks, with β HCG measurements averaging 3,000 IU/ml. Ultrasound (US) evaluation showed a deformed gestational sac and an embryo without fetal heart rate (FHR).

According to ACOG guidelines for the medical treatment of missed abortion, the patient received 2,000 mg of vaginal misoprostol in divided doses. The clinical condition was complicated by heavy vaginal bleeding. Hence, she underwent curettage, which failed to control the bleeding. Resectoscopy for the exploration of bleeding revealed remarkable thinning of the CS scar. Emergent laparotomy was performed, and thinning of the previous CS scar area became apparent. An anomalous tissue suspicious for an ectopic pregnancy remnant was sent to the pathology unit. The lower segment of the uterus was repaired.

Pathologic examination of the tissue demonstrated a partial molar pregnancy. After one week, the titer of β HCG decreased to 100 IU/ml. The patient was followed for six months until the β HCG level became undetectable (Figures 1-3). This year, the woman came to our prenatal clinic with a current pregnancy at 20 weeks of gestational age. After 18 weeks, she completed a successful pregnancy, delivered by cesarean section.

Comment

A small number of CS molar pregnancies have been reported in the literature. This entity is quite rare and, though it may be diagnosed by TVUS and/ or MRI, a high index of suspicion is required to avoid being surprised by a possible encounter. The patient may present with either vaginal bleeding or abdominal pain resulting from complications of a CS pregnancy, such as uterine rupture [4], or she may be asymptomatic [5].

As the prevalence of CS pregnancy has been increasing in recent years [6], it is possible that more patients with CS molar pregnancy will be encountered. Although the risk factors for the development of this pathology are not well known, several risk factors have been proposed for the development of CS pregnancies. The presence of a uterine scar resulting from previous cesarean delivery, dilatation and curettage, and induced abortion appears to be predisposing factors. However, the conditions that



Fig. 1: The thinning of lower segment of uterus

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Fig. 2: The lower segment had been repaired



Fig. 3: The partial molar view of remnant tissue

make such a scar area favorable for early embryo implantation remain unknown [7-9]. Some authorities have advocated that the number of previous cesarean deliveries is a risk factor for CS pregnancies, while others have argued against this [8, 9].

Concerning clinical presentation, a CS molar pregnancy is barely distinguishable from other types of ectopic pregnancy. Although high-resolution TVUS and Doppler flow sonography aid in diagnosis, a CS molar pregnancy is easily mistaken for a missed or incomplete abortion, especially if it is a partial mole. Our case was referred with such a misinterpretation.

Paying attention to the empty uterus and cervical canal, the anteriorly positioned gestational sac with thinning of the myometrium between the bladder and the sac, Doppler demonstration of peri-trophoblastic perfusion, and a fixed sac in response to compression by the TVUS probe raises suspicion of a CS pregnancy [10]. Ultrasound (US) features of a molar pregnancy, namely, a diffuse and mixed pattern of echogenicity, strongly suggest a CS molar pregnancy.

It is not known whether the treatment of CS molar pregnancy should differ from that of other molar pregnancies. It is rational to follow patients according to current guidelines for the treatment of molar pregnancy, as there are occasional reports of choriocarcinoma in CS pregnancies [11-14]. Initial treatment with dilatation and curettage, with or without methotrexate, is advisable, followed by timely follow-up and evaluation for systemic involvement [15].

The important point is that early diagnosis and treatment are crucial for patient survival. Data regarding subsequent pregnancies in these patients are limited. Here, we share our experience of a successful pregnancy following cesarean scar molar pregnancy.

Disclosure

The authors declare no financial interests in publishing this article and have no conflicts of interest

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