

Cesarean scar pregnancy complicated by uterine wall sequestration

Justyna Rybka, Sławomir Wozniak^{ORCID}, Tomasz Paszkowski^{ORCID}, Piotr R. Szkodziak^{ORCID}

3rd Chair and Department of Gynecology, Independent Public Teaching Hospital No 4, Lublin, Poland

INTRODUCTION

Cesarean scar pregnancy (CSP) is a potentially life-threatening, rare type of ectopic gestation [1–3]. In most of the cases, the uterus-sparing methods are the first-line treatment options for the management of CSP.

This case presents the failure of the CSP conservative treatment with an extremely rare outcome in the form of uterine wall sequestration at the site of cesarean scar.

CASE STUDY

Thirty-six-year-old patient with a history of three cesarean sections and hyperthyroidism was transferred from another hospital to the 3rd Chair and Department of Gynecology (University Hospital No. 4, Lublin, Poland) due to suspected incomplete miscarriage at a gestational age of nine weeks. The patient was previously treated with dilation and curettage (D&C) followed by 100 mg of I.V. methotrexate. Persistent bleeding was noted on admission and beta-hCG level was 4844 mIU/mL. A transvaginal ultrasound showed a highly vascularized structure with dimensions 68 x 39 mm within the lower segment of anterior uterine wall. The persistent cesarean scar pregnancy was diagnosed (Fig. 1A–B).

The patient was qualified for uterine arteries embolization (UAE) and subsequent suction curettage (SC) under I.V. general anesthesia. On the first day after the embolization beta-hCG level was 2568 mIU/mL and the patient was stable. As suction curettage appeared ineffective, the D&C was performed. Immediately after the curettage, the patient presented the signs of thyrotoxic crisis, which was successfully pharmacologically treated. On the eighth day after embolization, due to persistent bleeding and beta-hCG level of 1618 mIU/mL, the patient was qualified for the subsequent attempt of the products of conception removal by D&C. Due to profuse bleeding during and after the procedure (decrease in hemoglobin from 13.7 to 11.2 mg/dL), the Foley catheter balloon tamponade was used. After six hours the tamponade was removed — the bleeding stopped and beta-hCG decreased to 230 mIU/mL (Fig. 1C–D).

The patient was discharged from the hospital on the 13th day after UAE with light vaginal bleeding, decreasing hCG levels and normalized thyroid function. Clinical and biochemical monitoring was continued on the out-patient basis. Due to abundant growth of *E. coli* found in vaginal swab; the patient was treated with ciprofloxacin. Due to the persistent vascularized uterine lesion on ultrasound, increased bleeding and plateaued hCG level, the patient was readmitted to the hospital and qualified for surgical treatment (total abdominal hysterectomy with bilateral salpingectomy). The surgery was performed on the 44th day after the embolization. After opening the abdominal wall, sequestrum of the anterior uterine wall, approximately 30 mm in diameter, was revealed. At the site of the sequestrum, perforation of the uterine wall was found (Fig. 1D). The surgery was uneventful. The patient was discharged home in a good general condition on the third day after the surgery.

Postoperative histopathological examination of the lower uterine segment revealed necrosis and purulent inflammation of the mucosa and foci of chronic inflammation in the myometrium. Single clusters of trophoblast cells around the vessels and necrotic masses with the signs of perifocal organization suggestive of abnormally adherent placenta were found.

Corresponding author:

Justyna Rybka
 3rd Chair and Department of Gynecology, Independent Public Teaching Hospital No 4, Lublin, Poland
 e-mail: justyna.rybka@icloud.com

Received: 17.08.2022 Accepted: 11.09.2022 Early publication date: 15.11.2022

This article is available in open access under Creative Commons Attribution-Non-Commercial-No Derivatives 4.0 International (CC BY-NC-ND 4.0) license, allowing to download articles and share them with others as long as they credit the authors and the publisher, but without permission to change them in any way or use them commercially.

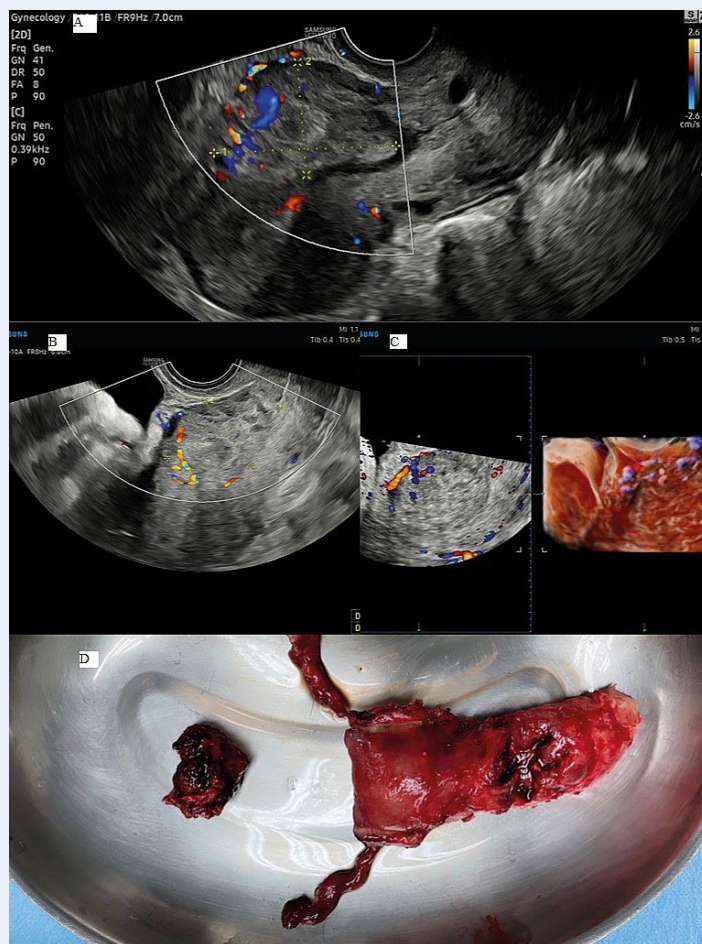


Figure 1. A. Ultrasound images of cesarean scare pregnancy before embolization of uterine arteries; B–C. Ultrasound images of cesarean scare pregnancy after embolization of uterine arteries and D&C; D. Postoperative specimen of the uterus with separated uterine wall sequester

COMMENT

This to our knowledge is the first description of the conservative CSP treatment complication in the form of uterine wall sequestration at the site of cesarean scar.

Management of CSP should be individualized and all possible outcomes must be considered while monitoring the effectiveness of therapy.

Conflicts of interest

The authors declare no conflict of interest.

REFERENCES

1. Timor-Tritsch IE. Cesarean scar pregnancy: a therapeutic dilemma. *Ultrasound Obstet Gynecol.* 2021; 57(1): 32–33, doi: [10.1002/uog.23549](https://doi.org/10.1002/uog.23549), indexed in Pubmed: [33387410](https://pubmed.ncbi.nlm.nih.gov/33387410/).
2. Yin X, Huang S. Clinical characteristics and treatment of different types of cesarean scar pregnancy. *Ginekol Pol.* 2020; 91(7): 406–411, doi: [10.5603/gp.2020.0065](https://doi.org/10.5603/gp.2020.0065), indexed in Pubmed: [32779161](https://pubmed.ncbi.nlm.nih.gov/32779161/).
3. Stępnia A, Paszkowski T, Jargiełło T, et al. Effectiveness, complications and reproductive outcome of selective chemoembolization with methotrexate followed by suction curettage for caesarean scar pregnancy - A prospective observational study. *Eur J Obstet Gynecol Reprod Biol.* 2019; 241: 56–59, doi: [10.1016/j.ejogrb.2019.08.004](https://doi.org/10.1016/j.ejogrb.2019.08.004), indexed in Pubmed: [31437622](https://pubmed.ncbi.nlm.nih.gov/31437622/).