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Case Report

Cesarean scar pregnancy report of two cases from Syria

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ABSTRACT

Notably there is a rapidly rate increase of caesarean deliveries, for nonmedical reasons, in Syria. Globally, cesarean sections (CS) outnumber vaginal deliveries according to World Health Organization (WHO), it was also noticed an increase of maternal complications, including a new kind of ectopic pregnancy in the CS scar. This report presents two cases of caesarean scar pregnancies in Syria. 42 years old patient G7P4, previous 3 CS, presented with pregnancy, a cesarean scar implantation was detected, and she refused the termination of the pregnancy. At ten gestational weeks came complaining of vaginal bleeding, due to fetal death, failed dilation and curettage (D&C). Then hysterectomy has been performed. The second case is a 38 years old patient, with failed D&C by a diagnosed cesarean scar pregnancy, previous 3 CS with vaginal bleeding, the patient requested the hysterectomy and that has been done. In these two cases, the total hysterectomy was a good method of management.

Keywords: Cesarean scar ectopic pregnancy, Hysterectomy, Transvaginal ultrasound, Low-income countries

INTRODUCTION

Notably there is a rapidly rate increase of caesarean deliveries, for nonmedical reasons, in Syria. It was also noticed an increase of maternal complications, including a new kind of ectopic pregnancy in the caesarean section (CS) scar. This report presents two cases of caesarean scar pregnancies.

The rate of CS is increasing globally. In many countries CS outnumber vaginal deliveries according to World Health Organization (WHO). In 2021 WHO reported that CS accounting for more than 1 in 5 (21%) of all childbirths.[1] There was also an 11-fold increase in CS due to maternal request in upper middle-income countries compared with either high or low middle-income countries.[2]

This led to increasing the rates of some complications such as haemorrhage and abnormalities of placentation, hysterectomy as well as a new kind of ectopic pregnancy in the CS scar. This ectopic pregnancy occurs when the embryo is implanted in the myometrium at the site of the previous caesarean section scar.[3] It can be recurrent by the same patient.[4] It can be easily misdiagnosed.[5,6]

This pregnancy should be early terminated and disrupted trophoblastic invasion prior to surgical management.[7] Colour ultrasound scan is important in its early diagnosis and transvaginal ultrasound remains the first-line imaging modality in the diagnosis of caesarean scar pregnancy, also magnetic resonance imaging (MRI) may provide useful information in equivocal cases for surgical planning.[5,7-9]

In some cases, can the pregnancy continue to term.[10] The management of this case varied widely. It can be treated medically with systemic, or local injection of Methotrexate, or surgically with wedge resection and hysteroscopy.[11-13]

Dilation and curettage (D&C) is another method for treatment preferred under ultrasonography guidance.[12,14,15] Hysterectomy is the latest method for the treatment of this condition, which should not be influenced by a patient's desire for no future fertility.[16]

CASE REPORT

Case 1

42 years old patient G7 P4, previous 4 CS, the last one was 5 years ago, her first pregnancy ended as an abortion in the 18th week due to intrauterine fetal death, the second and third pregnancies ended with 2 CS and alive healthy babies at term. The second CS has been complicated with uterine atony bleeding (postpartum hemorrhage (PPH)) and transfusion of 2 units of blood, the 4th pregnancy was an abortion at 10th week of gestation, heir D&C has been done, the 5th and 6th pregnancies were without complications ended with 2 CS alive healthy babies at term. Then an intra uterine devise was inserted for 2 years, which has been removed because of heavy menstrual bleeding and anemia.

She presented suffering from amenorrhea and positive pregnancy test. No bleeding, no abdominal or pelvic pain or other symptoms. The transvaginal ultrasound showed a gestational sac of 5 weeks in a very low position in the previous cesarean section scar. The endometrium was thick homogenous without gestational sac, and the cervix uteri was empty with well-defined line. Two weeks later the transvaginal ultrasound showed an embryo with positive heartbeat, in the CS-scar. The patient refused the pregnancy termination. She came after two weeks suffering from vaginal bleeding, her HB was 8.8 g/dl, and transvaginal ultrasound showed the death of the fetus at 10 weeks of gestation. Two units of blood transfused. D&C under general anesthesia was performed. Large pieces of placental tissue have been removed. An anterior bulging cavity, with thin wall, building an angel with the uterine cavity has been noticed. And it is difficult to get surgical instruments into this area. The bleeding stopped the patient discharged after the explanation to her, to come back in the event of recurrence of bleeding or after a week.

The patient came back a week later and reported varying amounts of vaginal bleeding, which, is slightly more than menstrual bleeding. Her Hb was 8 g/dl. The anemia has been corrected by transfusion of two units of blood; transvaginal ultrasound found that there was a heterogeneous mass in the place of cesarean scar. While the patient had fulfilled her reproductive desire, the patient's and husband's consent has been obtained; a total abdominal hysterectomy with bilateral salpingectomy was performed. She was discharged in a good condition, without complaints after surgery and she continued the treatment of anemia orally.

Case 2

The second case is 38 years old patient G4 P3, previous 3 CS, presented with the compliance of vaginal bleeding in the last three weeks, fatigue and sings of anaemia. An ectopic caesarean scar pregnancy has been diagnosed and D&C has been done by a college outside our house. The vaginal bleeding is varying in amount and colour, sometimes with clots and sometimes without clots. Her hemodynamic condition was stable and her haemoglobin was 9 g/dl. The patient had her reproductive desire fulfilled. She came requested the hysterectomy. Transvaginal ultrasound showed an inhomogeneous mass in the isthmus uteri bulging towards the bladder. After preparation for the surgery and signing the consent by the patient and her husband, a total abdominal hysterectomy with bilateral salpingectomies under general anaesthesia were performed. The postoperative development was free of complications, and the patient is free of complaints.

The histopathology of the tow resected uteri, confirmed with the diagnosis of caesarean scar ectopic pregnancy.

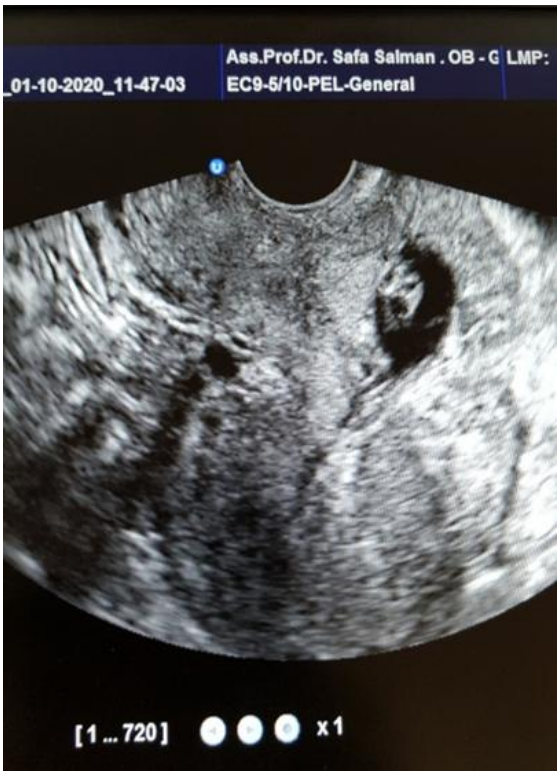

Figure 1: Transvaginal ultrasound: cesarean scar ectopic pregnancy.

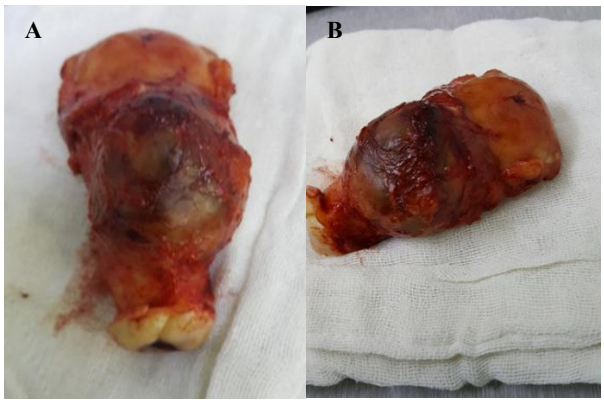

Figure 2 (A and B): Hysterectomy: cesarean scar ectopic pregnancy.

DISCUSSION

CSP has increased gradually parallel to the increased rates of CS worldwide, especially in Syria, where the prevalence of caesarean deliveries notably highly increased, there is no statistic yet.

Although the implantation in the previous CS scar is rare, it should be diagnosed and treated carefully it should be still in the list of differential diagnosis of the ectopic pregnancy, because it can cause life threatening complications. That is why we can say every pregnancy is ectopic until proven otherwise. Transvaginal sonography remains the main method and the suitable tool for the diagnosis.[4,7,8] Man can notice the empty cavum uteri and the normal line of the empty cervical canal as well as the bulging in the isthmus uteri forward to the bladder and the thinning in the myometrium. Also, 3D sonography can be used to identify this condition.[7] MRI should be reserved for difficult –to-diagnose cases.[7] The cheapest method for diagnosis in our country is the transvaginal ultrasound.

The management of a caesarean scar pregnancy ranges from conservative medical therapy to surgical treatment.[17] The medical treatment, with systemic methotrexate or local injection of methotrexate.[11,13] Also, Methotrexate followed by D&C, and surgical with wedge resection and hysteroscopy, or hysterectomy.[6,18,11,12] The combination between two methods is also possible, for example uterine artery embolism combined with methotrexate followed by curettage.[5] Many authors have utilised a combination of medical and surgical approaches in the management of cervical and caesarean section scar pregnancies with good outcome.[19] Removal of caesarean scar pregnancy with laparoscopic evaluation is another method.[20]

Once the CS-scar pregnancy diagnosed, termination of the pregnancy should be performed. Its` varied according to hemodynamic stability of the patient, productive desire, and the availability of the medical services. Low incomes decrease the ability to do diagnostic and treatment tools.

In these two cases, the patients were older than 35 years; each has had previous 3 CS, dilation and curettage failed, prolonged bleeding and anaemia and the reproductive desire has been fulfilled. For these reasons the decision for the hysterectomy was the best way for the treatment.

CONCLUSION

It is not recommended to evacuate the CS-scar ectopic pregnancy, the reason it may due to a difference in the axes. The uterine cavity has a longitudinal axis and the product of conception grow in a place bulging anteriorly towards the bladder building an angel with the axis of the uterus, and therefore the surgical instrument cannot reach it. Therefore, it is preferable to avoid the attempts of the curettage in this case, especially in low-income countries and if the patient has been fulfilled her reproductive desire, to avoid the blood loss, which could be life-threatening and to avoid the blood transfusion, which have many risks. It is better to relying on other methods to treat this kind of ectopic pregnancy based on clinical data and reproductive desire, especially in countries where medical facilities are shortage. Caesarean section should not be performed unless it is indicated.

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