



Case Report

J. Exp. Clin. Med., 2017; 34(4): 283-285

doi: 10.5835/jecm.omu.34.04.011



Treatment of intra-gestational methotrexate of cesarean scar ectopic pregnancy: A case report

Hasan Ulubaşoğlu^{a*}, Davut Güven^b

^a Department of Obstetrics and Gynecology, Education and Training Hospital, Samsun, Turkey

^b Department of Obstetrics and Gynecology, Faculty of Medicine, Ondokuz Mayıs University, Samsun, Turkey

ARTICLE INFO

ABSTRACT

Article History

Received 13 / 04 / 2016
Accepted 29 / 06 / 2016
Online Published Date 10 / 10 / 2019

* Correspondance to:

Hasan Ulubasoglu
Department of Obstetrics and
Gynecology, Education and Training
Hospital,
Samsun, Turkey
e-mail: h.ulubas@hotmail.com

Cesarean scar pregnancy is the localization of uterine out of the cavity. There is a variety of treatment methods of cesarean scar pregnancy. There is not yet a consensus on treatment of scar pregnancy by using a preferred method. A 28-year-old woman applied to our center with the suspicion of pregnancy. A cesarean scar pregnancy that had fetal heart beats consistent with 6 weeks +2 days was determined in the area of incision line of uterus. Methotrexate was injected to the patient with oocyte pick-up needle under transvaginal ultrasonograph. No complication developed after the procedure. The patient was discharged in good health from the hospital the next day and her hcg levels turned back to normal level.

Keywords:

Methotrexate
Pregnancy
Scar pregnancy

© 2017 OMU

1. Introduction

Cesarean scar pregnancy is the localization of uterine out of the cavity by surrounding completely with the fibrous tissue of the previous lower uterine segment cesarean scar and myometrium. Deterioration in endometrium and myometrium after cesarean section can set ground for implantation in uterine scar. Early invasion of myometrium is a condition that can cause uterine rupture and excess bleeding in the first trimester (Jurkovic et al., 2003). Because the cases of cesarean increase nowadays and can be detected more easily by ultrasonography, the incidence of such cases has been increasing. Rate of incidence is 1/1800-1/2216

among all pregnancies, and 0.15% among the women having history of cesarean (Chueh HY, 2008). Due to being observed rarely, cesarean scar pregnancies are present as case reports in the literature. In the literature, there is a variety of treatment methods of cesarean scar pregnancy. Treatment options such as local or systemic methotrexate (MTX), expecting treatment, uterine artery embolization, uterine curettage, local potassium chloride (KCl), hysteroscopy, laparotomy or laparoscopic excision, hysterotomy and hysterectomy are reported. Early and true diagnosis, alternative treatment options and combinations are very important for preventing serious complications (Katarzyna

and Ermanno, 2011). There is not yet a consensus on treatment of scar pregnancy by using a preferred method. Generally, such cases are referred to advanced centers for examination and treatment. In our hospital, such cases are successfully treated. The aim of this study was to present a case of cesarean scar pregnancy we treated successfully by administering single dose of methotrexate.

2. Case report

A 28-year-old woman, who was gravida 3 and para 2, had 2 previous cesarean sections. The patient applied to an external center with the suspicion of pregnancy and was referred to our hospital with diagnosis of cesarean incision scar pregnancy during her examination. She was suffering from struma and depression; and was receiving medical treatment for 10 years due to depression. According to her last menstrual period, she was pregnant for 6 weeks +2 days. In the examination, her vital findings were found to be stable. In both transvaginal and abdominal ultrasonography, a cesarean scar pregnancy that had fetal heart beats consistent with 6 weeks +2 days was determined in the area of incision line in the frontal side of uterus. Endometrial cavity and cervix were empty (Fig. 1).



Fig. 1. Ultrasonographic image of endometrial cavity and cervix.

There was no fluid in the douglas. The gestational sac was settled in old uterine scar in the lower segment of uterine and prolonged towards serosa of uterus. The hemogram and routine biochemistry values were determined to be normal in routine examinations of the patient. The possible risks, which could occur such as rupture bleeding if it was not treated, and treatment options were told to the patient and local methotrexate administration was decided. 50 mg local MTX was injected to the patient with oocyte pick-up needle under transvaginal ultrasonography-guided mask anesthesia. No complication was developed during and after the

procedure. The patient was discharged in good health from the hospital the next day and called for weekly ultrasonography and b hcg checks until her b hcg levels turned back to normal level.

3. Discussion

Because the rates of cesarean have increased today and advanced ultrasound devices have been used, the incidence and diagnosis rates of cesarean scar pregnancy have increased (Sadeghi, 2010). There are cases of scar pregnancy diagnosed with transabdominal ultrasonography in 16th and 23rd weeks in literature. The diagnosis of our case was made in the 6th week of the pregnancy. The uterus isthmic segment localization of our case had the ultrasonographic diagnosis criteria of scar pregnancy with its reduced myometrial layer between the gestational sac and the bladder (Jurkovic, 2003).

The initial complaints of the patients can be vaginal bleeding or/and stomachache; can be realized during routine follow-ups; and can be asymptomatic. Almost half of the patients in the literature are asymptomatic (Maymon, 2004). It was asymptomatic in our patient and she was not describing any complaint. The diagnosis was made during routine pregnancy examination and the patient was referred to us.

The first treatment of scar pregnancy dates back to 1978 with the removal of lesion tissue (Litwicka, 2011). Even though there are numerous treatment modalities are administered in the literature, there is not yet a consensus on the most appropriate treatment approach of scar pregnancy. In the study conducted Le et al., with 38 patients, they compared uterine artery embolization and methotrexate treatment with a new method they called as “transvaginal surgery”, and determined the method of transvaginal surgery to be more successful in treatment. In this method, they determined a significant decrease in b hcg value and more rapid healing in menstrual cycle (Le et al., 2013). In another study, it was stated that resection of cesarean scar pregnancy and repair of defect, occurring after resection, with laparoscopy and laparotomy was a safe technique (Rotas, 2006). In the study of Godin et al. they treated these cases with intragestational methotrexate, and found that the treatment to be effective due to the high concentration in the sac (Godin, 1997).

We transvaginally administered local methotrexate in the gestational sac in our case. We discharged the patient in good health from the hospital next day. The b hcg levels of our case turned back to normal 1 month later. Consequently, treatment of transvaginal intragestational methotrexate is a short, effective, safe treatment method which protects fertility, does not have any major complication and enables us to avoid surgical procedures such as laparotomy and laparoscopy. However, further studies are needed on an efficient treatment method on this subject.

REFERENCES

- Chueh, H.Y., Cheng, P.J., Wang, C.W., 2008. Ectopic twin pregnancy in cesarean scar after in vitro fertilization/embryo transfer: case report. *Fertil. Steril.* 90, 2009.e19-e21.
- Godin, P.A., Bassil, S., Donnez, J., 1997. An ectopic pregnancy developing in a previous caesarean section scar. *Fertil. Steril.* 67, 398-400.
- Jurkovic, D., Hillaby, K., Woelfer, B., Lawrence, A., Salim, R., Elson, C.J., 2003. First-trimester diagnosis and management of pregnancies implanted into the lower uterine segment cesarean section scar *Ultrasound Obstet. Gynecol.* 21, 220 – 227.
- Katarzyna, L., Ermanno, G., 2011. Cesarean scar pregnancy. A review of management options. *Curr. Opin. Obstet. Gynecol.* 23, 415-421.
- Le, A., Shan, L., Xiao, T., Zhuo, R., Xiong, H., Wang, Z., 2013. Transvaginal surgical treatment of cesarean scar ectopic pregnancy. *Arch. Gynecol. Obstet.* 287, 791-796.
- Litwicka, K., Greco, E., 2011. Cesarean scar pregnancy: a review of management options. *Curr. Opin. Obstet. Gynecol.* 23, 415-421.
- Maymon, R., Halperin, R., Mendlovic, S., 2004. Ectopic pregnancies in a Cesarean scar: review of the medical approach to an iatrogenic complication. *Hum. Reprod. Update.* 10, 515-23.
- Sadeghi, H., Rutherford, T., Rackow, B.W., 2010. Cesarean scar ectopic pregnancy: case series and review of the literature. *Am. J. Perinatol.* 27, 111-120.
- Rotas, M.A., Haberman, S., Levgur, M., 2006. Cesarean scar ectopic pregnancies etiology, diagnosis and management. *Obstet. Gynecol.* 107, 1373-1381.