Reproductive BioMedicine Online (2014) **29**, 530–533

www.sciencedirect.com
www.rbmonline.com

REVIEW

Intact removal of spontaneous twin ectopic Caesarean scar pregnancy by office hysteroscopy: case report and literature review

Antonio Mollo [a], Carlo Alviggi [a], Alessandro Conforti [a,*], Luigi Insabato [b], Giuseppe De Placido [a]

[a] *Dipartimento di Neuroscienze, Scienze Riproduttive ed Odontostomatologiche –Università degli Studi di Napoli 'Federico II', Via Sergio Pansini, 5-80131, Naples, Italy*; [b] *Dipartimento di Scienze Biomediche Avanzate, Università degli Studi di Napoli 'Federico II', Via Sergio Pansini, 5-80131, Naples, Italy*

* Corresponding author. *E-mail address:* confale@hotmail.it (A Conforti).

Antonio Mollo was born in Naples on 3 January 1966. He obtained his MD in 1990, his certification in obstetrics and gynaecology in 1995 and his PhD in physiopathology of human reproduction in 2003. In 1997 and 2000, he worked as a clinical research fellow in the Minimally Invasive Therapy Unit at the Royal Free Hospital, London, UK. Since 2006, he has lectured in obstetrics and gynaecology, and is chief of the Gynaecological Endoscopic Unit at Federico II University of Naples. He has authored more than 30 articles published in international peer review journals.

Abstract Caesarean scar pregnancy is a dangerous condition that occurs when an embryo is implanted in a previous Caesarean scar. This condition has become more frequent as a direct consequence of the increased number of Caesarean sections reported worldwide. Timely diagnosis of this condition is fundamental, and allows a conservative approach to preserving fertility. A wide range of medical and surgical strategies has been described, with no consensus on preferred management. Recently, hysteroscopic surgery has been proposed as a conservative strategy, with interesting results in reproductive outcome, postoperative course and success rate. Most cases of Caesarean scar pregnancy reported worldwide involve a singleton pregnancy. A peculiar case of fully documented office hysteroscopic removal of twin Caesarean scar pregnancy is presented in this paper. This procedure took place in a tertiary care university hospital without cervix dilatation, under conscious sedation, after failure of systemic methotrexate administration. Complete removal of the ectopic pregnancy was obtained without intra- and postoperative complications.

http://dx.doi.org/10.1016/j.rbmo.2014.06.017
1472-6483/

KEYWORDS: caesarean scar pregnancy, ectopic pregnancy, hysteroscopy, twin pregnancy

Introduction

Caesarean scar ectopic pregnancy (CSEP) is an extremely dangerous condition that occurs when an embryo is implanted in a previous Caesarean scar (Ash et al., 2007). Although it is considered a rare event, CSEP has been more frequently reported than cervical pregnancy, owing to an increase in the number of reported Caesarean sections worldwide (Litwicka and Greco, 2011; Shih, 2004).

Many surgical or medical strategies have been proposed to treat this condition, including methotrexate administration, local injection of embryocides, uterine curettage and laparoscopic surgery.

Recently, a hysteroscopic approach has been proposed as a conservative surgical strategy. This approach has shown appreciable results in success rate, shorter follow-up duration and rapid return of fertility (Deans and Abbott, 2010). Most cases reported worldwide involve singleton pregnancies. In the present paper, a peculiar case of twin CSEP is presented. Specifically, this is the first report of a fully documented hysteroscopic approach to twin CSEP without cervix dilatation under conscious sedation after failure of systemic methotrexate administration.

Case report

A 30-year old woman was admitted to our endoscopic gynaecology units at tertiary care university hospitals (Dipartimento di Neuroscienze, Scienze Riproduttive ed Odontostomatologiche, Federico II – University of Naples, Italy) with mild vaginal bleeding at 7 weeks of amenorrhoea and beta-HCG of 1809 mIU/ml. Transvaginal ultrasound revealed an empty uterine cavity and the presence of two gestational sacs implanted on the anterior part of the uterine isthmus, with a mean diameter of 4.21 and 5.72 mm, respectively (**Figure 1**). Both ovaries seemed normal, and no fluid on the 'cul-de-sac' was observed. Obstetric history showed four caesarean sections with two previous still births, and one surgically induced abortion. The woman was affected by antiphospholipid syndrome and treated with enoxeparin (4000 IU subcutaneously daily) and aspirin (100 mg orally daily) since the occurrence of pregnancy. She was clinically stable at the time of admission with no pelvic pain reported during bimanual pelvic examination.

After extensive discussion with the woman about her condition, and the possible strategies available, she opted for conservative interruption of the twin pregnancy. Specifically, a multiple-dose methotrexate treatment protocol (1 mg/kg intramuscular) was agreed upon. Full informed consent was obtained and any condition that could have contraindicated this regimen excluded (ASRM, 2013). After 6 days of treatment with methotrexate, beta-HCG increased to 2262 mIU/ml, with no regression of pregnancy at ultrasound imaging. Nevertheless, the woman's clinical condition remained stable with no significant changes. Among the possible conservative strategies available, a hysteroscopic approach was chosen. A consent form was signed by the patient after all the risks were comprehensively explained, including the possibility of further invasive interventions, such as hysterectomy or other surgical approaches.

Under conscious sedation, the patient was placed in the dorsolithotomy position. The entire procedure was carried out at our institution. Operating theatre staff were alerted in advance should adequate assistance be needed if conversion to laparoscopic or laparotomic surgery was required.

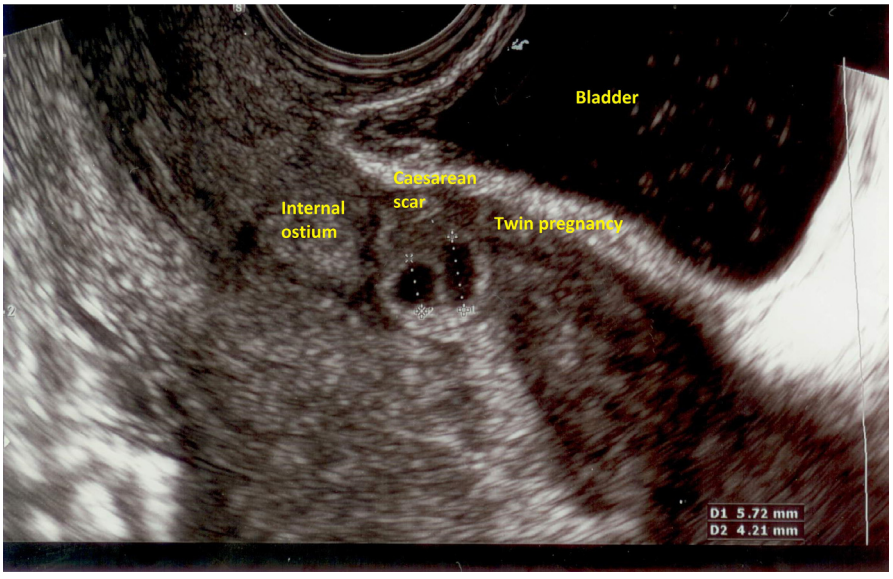

Figure 1 Sagittal trasvaginal ultrasound imaging of twin Caesarean scar pregnancy showing two gestational sac anchored to Caesarean scar and empty uterine cavity.