TheTrocar Issue 4 Volume 5 / Page 42- 44 ISSN: 2736-5530

Niche pregnancy complicated by bleeding: A case report (Video)

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Abstract

Background: Niche pregnancy, one of the rarest types of ectopic pregnancy, is a result of the placental implantation on the scar of a previous caesarean section or in the niche. Clinical symptomatology varies, although most patients are asymptomatic. Transvaginal ultrasonography remains the milestone in the diagnosis of niche pregnancy.

Objectives: The aim of the video is to demonstrate a niche pregnancy complicated by bleeding and managed by hysteroscopy and laparoscopic suture compression.

Materials and Method: A 37-year-old woman V. gravida, IV. Para, at 8+6 gestational age, and three caesarean sections in the past obstetric history (the last one performed five years ago) with an isthmocele pregnancy.

Result: Postoperative the patient was discharged in a stable condition and had no abnormal findings in the follow-up visits at our outpatient department.

Conclusion: The video shows that a laparoscopic suture compression could be a safe and efficient option towards bleeding control during the management of an isthmocele pregnancy.

Key words: niche pregnancy; isthmocele pregnancy; hysteroscopy; laparoscopy; bleeding

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DOI: 10.36205/trocar5. vid24006
Received: 2024-11-04– Accepted: 2024-11-21

Introduction:

Niche pregnancy, also known as isthmocele or caesarean scar pregnancy (CSP) is a rare type of ectopic pregnancy which occurs when the pregnancy implants on the uterine scar or in the niche after a previous caesarean section (CS) (1,2). The increasing number of caesarean deliveries worldwide cause a parallel increase of Niche pregnancies (3,4). There are several suggested classifications of CSP, with modified Delphi being the most frequently utilized (5). Clinical symptomatology varies, although most patients are asymptomatic. Transvaginal ultrasonography remains the milestone in the diagnosis of CSP pregnancy (5,6). More than 30 regimens, medical and surgical, have been described for the treatment of CSP. However, no standardized approach has been designed so far due to lack of consensus (7).

Patient and Method:

A 37-year-old woman V. gravida, IV. Para, at a gestational age of 8 weeks 6/7, and three CS in the past obstetric history (the last one performed five years ago) presented to the emergency department of the hospital with vaginal bleeding a few days prior to consultation. Clinical examination showed a closed external os and no vaginal bleeding.

Transvaginal ultrasonography revealed a 32 mm gestational sack with an embryo with positive heartbeat in the niche. According to the modified Delphi method this CSP was classified as Type 3 with a rest myometrium (RMT) OF 2,5mm. First of all, a mobilisation of the pregnancy was carried out, using the hysteroscope itself and a blunt dissector, followed by the removal of CSP by suction. Due to persistent intraoperative bleeding a foley catheter was placed for intrauterine compression followed by a laparoscopic compression suturing of the preexisting niche.

Results:

Postoperatively the patient was discharged the next day in a stable condition and had no abnormal findings in the follow-up visits at our outpatient department.

Conclusions:

Although CSP pregnancy is a rare entity, its early diagnosis and appropriate management are really crucial to prevent life-threatening complications and preserve the future fertility of the patient. As there is no consensus for the therapy of CSP, more randomised clinical trials (RCT) are needed to evaluate and standardize its management. However, as shown in the video, a combined hysteroscopic and laparoscopic approach seems to be a safe and efficient option towards bleeding control during CSP management.

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