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CLINICAL IMAGE

Isthmocele, a rising pathology

Andreia de Vasconcelos Gaspar[1] | **Ana Brandão**[2]

[1]Serviço de Ginecologia e Obstetrícia B, Centro Hospitalar e Universitário de Coimbra, Coimbra, Portugal

[2]Serviço de Ginecologia e Obstetrícia, Hospital de Cascais, Alcabideche, Portugal

Correspondence
Andreia de Vasconcelos Gaspar, Serviço de Ginecologia, Centro Hospitalar e Universitário de Coimbra, Rua Prof. Mota Pinto, 3004-561 Coimbra, Portugal.
Email: andreiadevasconcelosgaspar@gmail.com

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Abstract

Isthmocele is a growing pathology due to the increase in the number of cesarean deliveries. Pelvic pain and abnormal uterine bleeding are common complaints in our clinical practice, and isthmocele should be included in the differential diagnosis, especially in women who underwent previous cesarean sections.

KEYWORDS

cesarean scar defect, isthmocele, niche, uterine sacculation, uterine scar defect

An isthmocele corresponds to a myometrial discontinuity at the hysterotomy site. Although its exact prevalence is unknown, it is an emerging pathology due to the increasing number of cesarean sections. Its prevalence ranges from 24% to 70% on transvaginal ultrasound and between 56% and 84% on sonohysterography in women

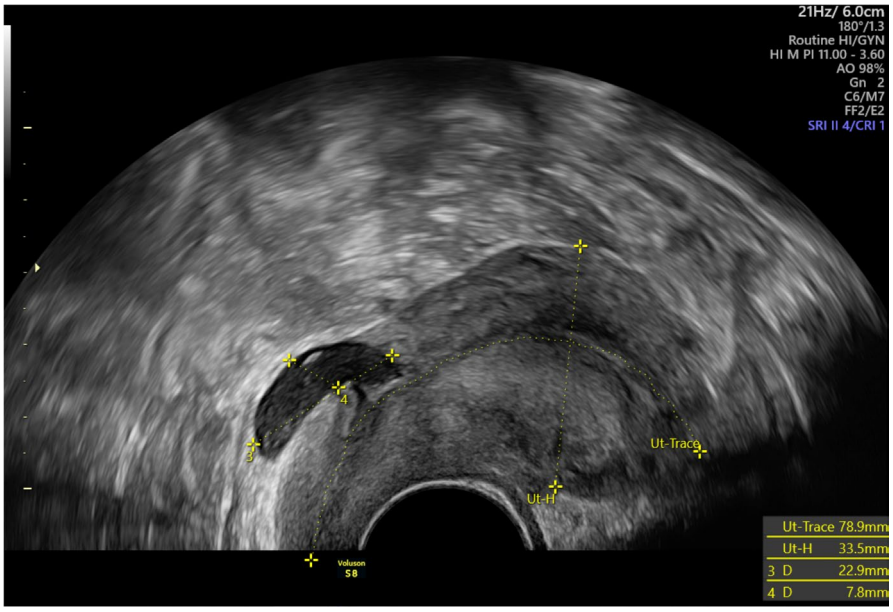

FIGURE 1 Transvaginal ultrasound revealing uterus in sagittal section, in retroversion, with a defect in the isthmus, at the site of an anterior scar

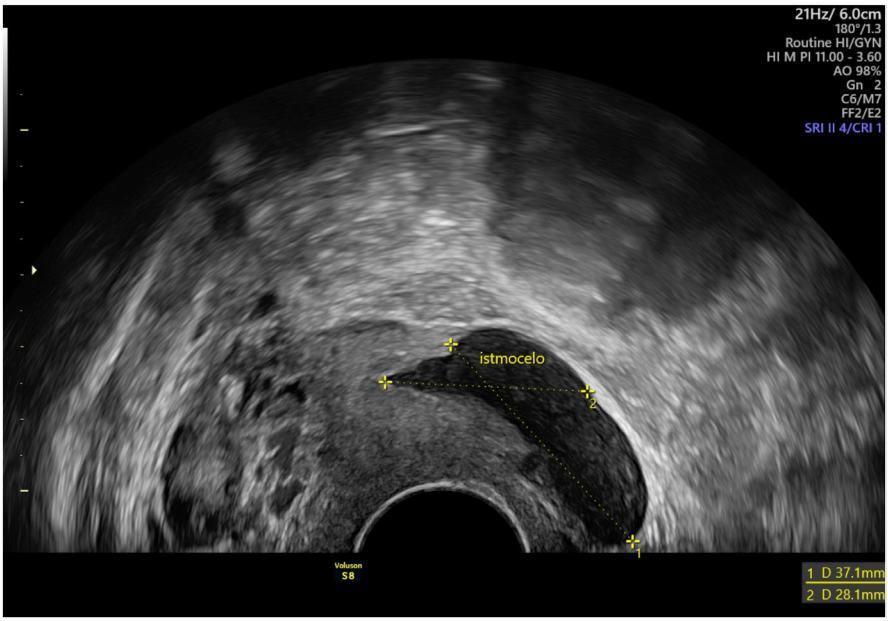

FIGURE 2 Isthmocele in axial section, with the largest dimension of 37 mm

who underwent one or more previous cesarean sections.[1] It is often associated with abnormal uterine bleeding and chronic pelvic pain.[2]

A 32-year-old woman, melanodermic, with a history of two previous cesarean sections, was referred due to pelvic pain with several months of evolution. She was under contraception with a subcutaneous implant. She performed a transvaginal ultrasound, which revealed a retroversion uterus measuring 79 × 33 × 43 mm, with regular contours and a myometrium with a diffusely heterogeneous echostructure; with the endometrial echo measuring 2.4 mm. At the level of the hysterorrhaphy zone, a 23 × 8 × 37 mm isthmocele was observed, presenting an anechogenic content with suspended echoes, suggestive of collected blood (Figures 1 and 2). Due to the associated symptomatology and volume of the defect, surgical correction was decided.

Isthmocele is an emerging pathology with associated morbidity.[2] Ultrasound is a good method for diagnosing this condition. Treatment depends on associated symptoms, defect size, and reproductive desire.[3] Although there are no studies on the prevention of this pathology, the surgical technique seems to be paramount, since there is a correlation between cesarean section defects and low hysterotomy, close to the cervical portion of the uterus. Incomplete, unintentional closure of the myometrium's deeper muscular layer of the myometrium can also lead to this type of defects.[4]

This condition should be considered in women with a history of previous cesarean section, with complaints of pelvic pain, abnormal uterine bleeding, or infertility.

CONFLICT OF INTEREST

The authors declare that they have no conflicts of interest related to this work.

AUTHOR CONTRIBUTIONS

Andreia de Vasconcelos Gaspar involved in conceptualization; methodology; software; investigation; resources; writing—original draft preparation; and writing—review and editing. Ana Brandão involved in conceptualization; validation; writing—review and editing; and supervision.

ETHICAL APPROVAL

The authors declare that the procedures were followed according to the regulations established by the 2013 Helsinki Declaration of the World Medical Association. The authors declare having followed the protocols in use at their working center regarding patients' data publication.

CONSENT

Written informed consent was obtained from the patient to publish this report in accordance with the journal's patient consent policy.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable—no new data are generated.

ORCID

Andreia de Vasconcelos Gaspar https://orcid.org/0000-0003-3071-1236

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