



A case of caesarean scar niche and raising awareness: Review of literature



Bolton

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Asha Shashidhara, Neeraja Singh

Department of Obstetrics & Gynaecology, Royal Bolton Hospital

Objective

This case report highlights the challenges in diagnosing caesarean scar niche and importance of case specific discussions in deciding further management.

We aim to review current literature pertaining to its cause, diagnosis, and management recommendations.

Case Summary

A 31-year-old women was seen in Gynaecology outpatient clinic with a long-standing history of intermenstrual bleeding, which started since the birth of her last child 5 years ago. She is Para 3, having had 3 children, 1 born by forceps assisted vaginal delivery and 2 planned caesarean sections.

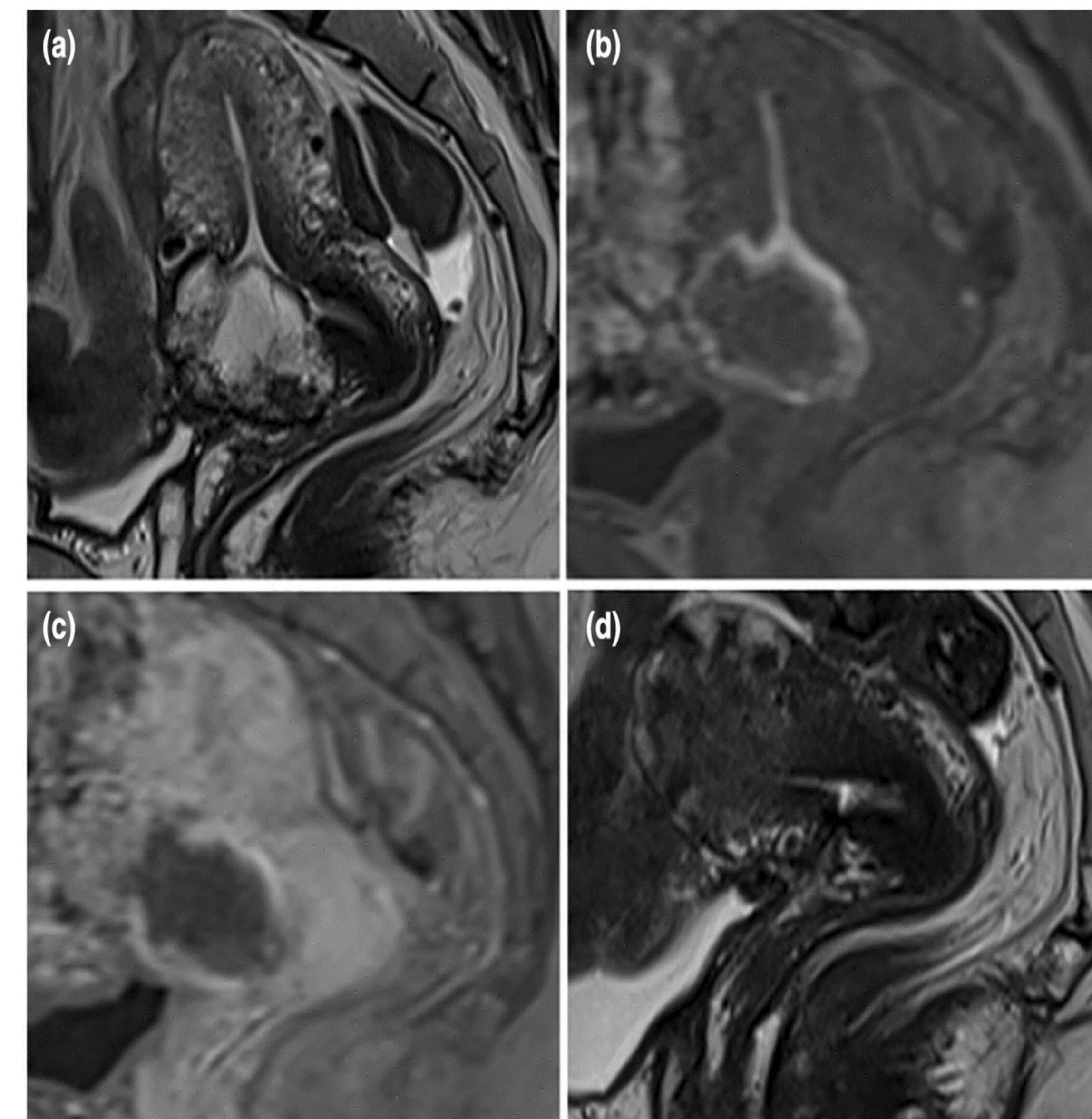
Medical management with non-hormonal and hormonal options were not effective in managing the bleeding. Her cervical smears were normal, and an ultrasound scan pelvis done noted a focal echogenic area in cervical cavity suspicious of a cervical polyp.

However, the outpatient hysteroscopy last year revealed a normal retroflexed uterine cavity with no polyp and no obvious caesarean scar niche noted. Patient was requesting for hysterectomy. After long discussion regarding risks of major surgery such as hysterectomy, further imaging with MRI was arranged.

Management

On MRI pelvis, a large caesarean section niche with semi-circular morphology containing blood was seen in continuity with the endometrial cavity, which could explain the history of irregular vaginal bleeding if the blood is periodically expelled after the end of menstruation

Patient was extensively counselled and recommended to have laparoscopic repair of the caesarean section scar niche, however, she has opted for hysterectomy.



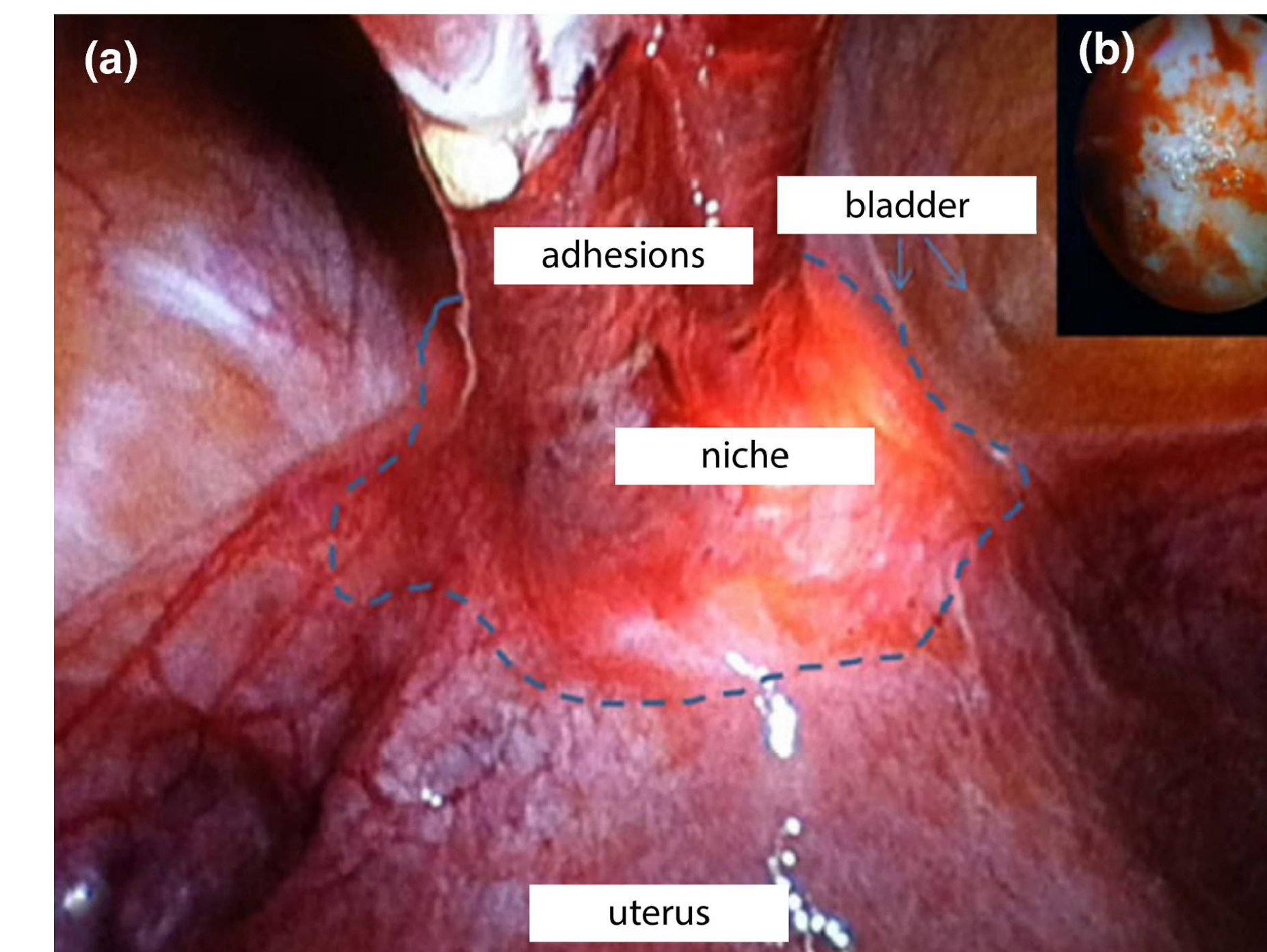
Discussion

A caesarean scar niche was first described in 1961 when a wedge-shaped defect was noted in the uterine wall during hysteroscopy in a patient who had previously had a caesarean section and is defined as a presence of hypoechoic area and discontinuation of myometrium at a previous lower segment caesarean scar site.¹

Its precise prevalence is unknown and there are several theories on caesarean niche development and caesarean technique.²

The symptoms can vary from being asymptomatic to irregular menstrual bleeding, chronic pelvic pain and secondary subfertility.

It can be diagnosed using two- or three-dimensional transvaginal scan as well as Magnetic resonance imaging. Based on the findings, management option includes medical and surgical management by hysteroscopic resection or laparoscopic repair of caesarean scar niche.



* Fig: TOG 2020; 22:122-30²

Counselling about management options

- Conservative
- Medical
 - Oral hormone treatment, LNG and Mirena IUS
- Hysteroscopic
 - Rollerball ablation to niche
 - Trans cervical resection
- Laparoscopic niche repair
- Hysterectomy

Conclusion

With the increasing caesarean section rates worldwide, the adverse long-term sequel is also inevitably increasing. The gynaecological sequel of caesarean section frequently overlooked. There is an increasing awareness of Caesarean scar niche as a complication which is multifactorial, associated with poor wound healing, caesarean section technique and uterine retroflexion.

Patients should be counselled on the risk and management individualised based on symptoms and imaging.

References

1. Armstrong F, Mulligan K, Dermott RM et al. Caesarean scar niche: an evolving concern in clinical practice. The International Journal of Gynaecology & Obstetrics 2022; 00:1-11
2. Brook AJ, Clarke FR, Bhatia K. Gynaecological morbidity associated with caesarean niche: increasing awareness, prevention, and management. The Obstetrician & Gynaecologist 2020; 22:122-30