

Laparoscopic Repair of Uterine Niche with Subsequent Pregnancy Outcome

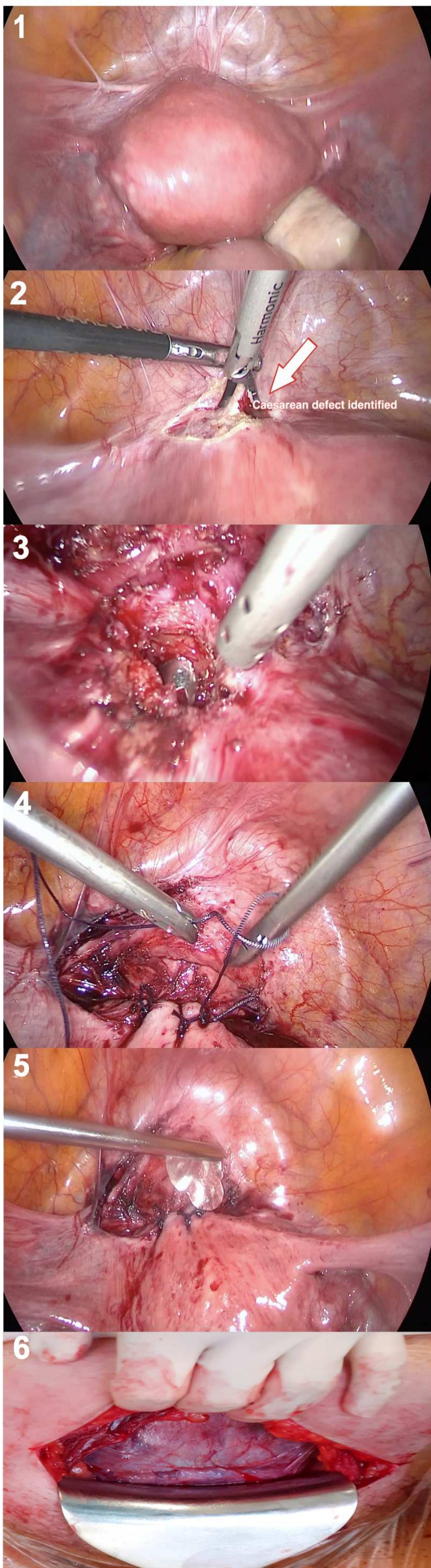
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Introduction

Uterine niche may be present following impaired healing after transverse lower segment caesarean. A 33 year old with uterine niche after 2 successive vaginal births following caesarean section was initially managed conservatively for 2 years. Since she remained symptomatic with discharge and intermenstrual bleeding, she opt for laparoscopic repair of the niche.

Imaging Pre-operation

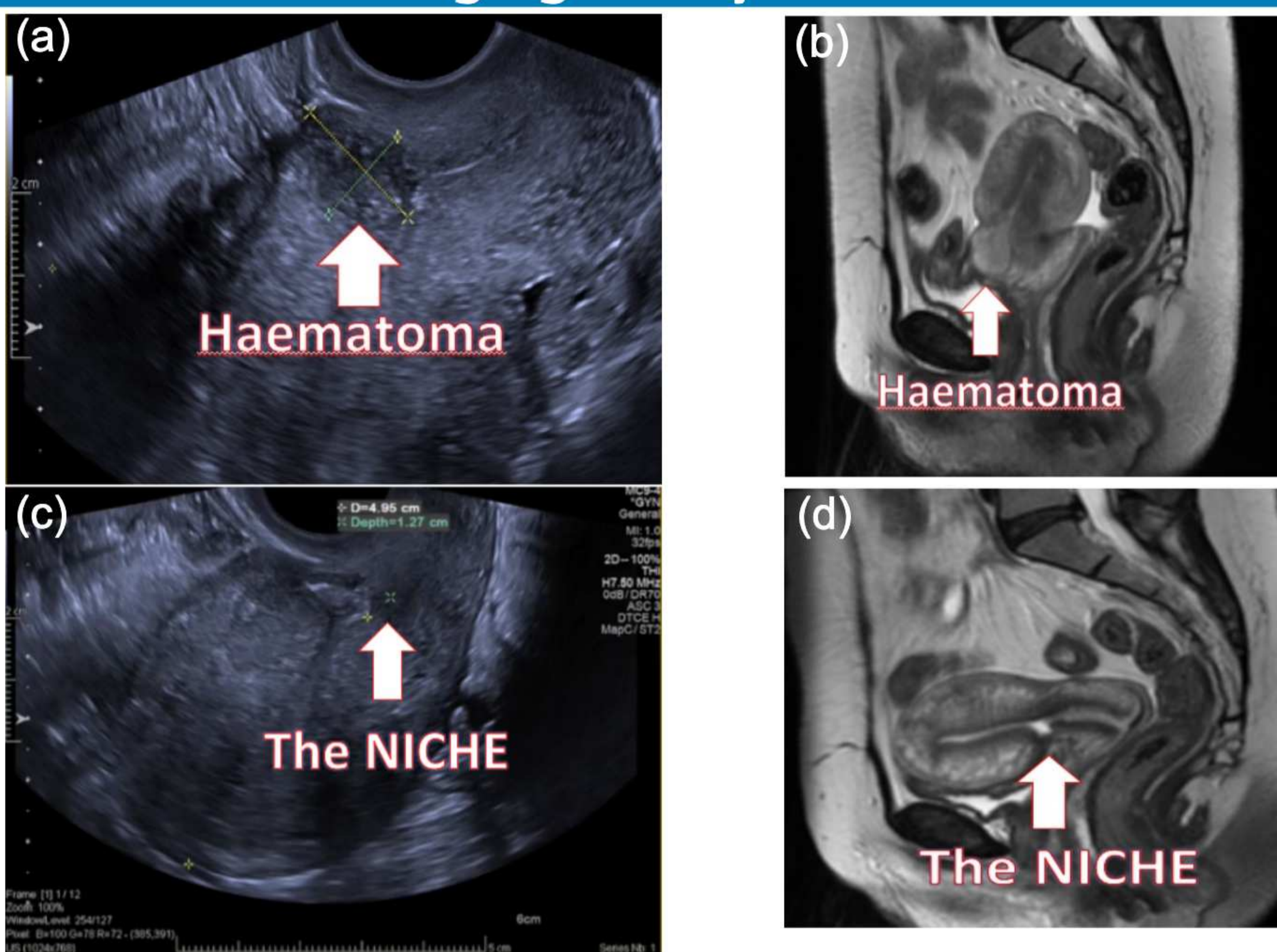


Image (a) and (b) - Haematoma in close relation to the NICHE observed on ultrasound scan and MRI scan in 2016, respectively. Image (c) and (d) - Disappearance of haematoma with visible NICHE remaining after conservative management, observed on ultrasound scan and MRI scan in 2018, respectively.

Methodology

(1) At time of laparoscopy, an ultrasonic device was used to divide pelvic adhesions and to separate the bladder and anterior uterine wall. (2) A size 8 Hegar dilator was inserted via endocervical canal into the intrauterine cavity, which revealed the location of the niche upon dissection of uterovesical fold. (3) The scar tissue at the edges of the niche were excised until only healthy myometrial tissue remained. (4) 3 interrupted sutures in a single layer were placed intra-corporeally with vicryl 1-0, to include the full-thickness of myometrium, starting from the middle of the niche, to ensure that the tensioned edges were well-approximated. (5) Hyalobarrier gel was applied to area prior to closure to prevent formation of adhesion. (6) Delivery by caesarean for subsequent pregnancy due to myometrial surgery, full-thickness myometrium seen at subsequent caesarean section.

Discussion

Laparoscopic repair is a viable option for uterine niche defect involving full-thickness of myometrium. Successful repair can provide symptomatic relief and offer options of further pregnancies. Caesarean delivery for subsequent pregnancies is recommended post-laparoscopic uterine niche repair.

Conclusion

Management of uterine niche should be individualised. While conservative management was attempted, in this case, repair was necessary due to ongoing symptoms experienced by the patient. A laparoscopic-approach was employed over a hysteroscopic approach, as there was full-thickness myometrium involvement.

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