



ORIGINAL RESEARCH PAPER

Radiology

UTERINE SCAR ENDOMETRIOMA: A CASE REPORT

KEY WORDS:

Dr. Malik Masheerul Haq

MD, Department of Radiodiagnosis and Imaging, SKIMS Srinagar.

Dr. Noorulain Bashir

MD, Department of Obstetrics & Gynaecology, GMC Srinagar

Dr. Sehrish Shaheen

MD, Department of Radiodiagnosis and Imaging, SKIMS.

Dr. Haroon Rashid

MD, Department of Radiodiagnosis and Imaging, SKIMS.

ABSTRACT

Introduction And Importance: Uterine scar endometriosis is a rare form of endometriosis due to previous surgical scars from obstetrical and gynecological procedures. Its challenging diagnosis to make. **Case presentation:** A 34-year-old multiparous female presented with intermittent lower abdominal pain and inter-menstrual bleeding for the past 4 months. Ultrasound revealed a heterogenous, predominantly hyperechoic lesion measuring 40x51x54mm in the myometrium of anterior lower uterine segment extending to cervical stroma. MRI revealed a lobulated mass lesion in the anterior wall of lower uterine segment, extending along the scar niche. The lesion showed heterogenous hyperintense signal on T2WI with hyperintense signal on T1WI (sub-acute blood). No significant post contrast enhancement was seen. Impression of a scar site endometriosis was made. Subsequently the patient underwent diagnostic laparoscopy, which revealed a lobulated cystic mass in the lower uterine segment, with oozing of chocolate brown material on compression. As the mass was deep-seated in the lower uterine segment, a laparotomy was decided upon and total abdominal hysterectomy with ovarian conservation was performed. Histopathology confirmed the diagnosis of endometriosis. **Conclusion:** In any women of reproductive age with lower abdominal pain and solid appearing mass lesion at the uterine scar from previous obstetric or gynaecologic surgery, uterine scar endometriosis should be considered.

INTRODUCTION

Karl Von Rokitansky was the first to describe Endometriosis in 1860. It is a chronic gynaecologic condition in which morphological and functional endometrial glands and stroma are present outside the uterine cavity [1,2]. It mostly affects women of reproductive age.

Uterine scar endometriosis can occur due to iatrogenic implantation (implantation theory) when due to obstetrics and gynaecological surgical manipulation, the refluxed endometrial tissue is implanted on ectopic sites [3,4]. Under proper hormonal influence, the endometrial tissue proliferates. [3,4,5,6].

Scar endometrioma is a rare disease, which is often difficult to diagnose. The diagnosis is often made after excision and histopathological examination of the lesion.

We report a case of endometriosis of uterine wall scar.

CASE REPORT

A 34-year-old female G3P2L2A1 presented with intermittent lower abdominal pain and inter-menstrual bleeding for the past 4 months. She had previous 2 lower segment caesarean sections and a dilatation and curettage for RPOCs. Last was done 2 years back.

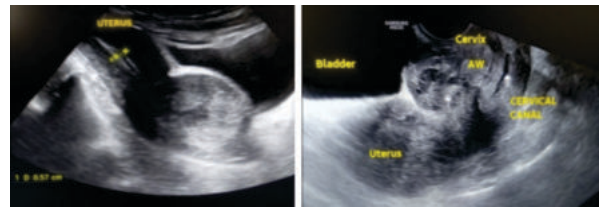
On physical examination, abdomen was non-distended and non-tender. Skin incision site was unremarkable.

Transabdominal ultrasound revealed a heterogenous hyperechoic lesion in the anterior wall of lower uterine segment. TVS was done for better characterisation of the lesion, which revealed a heterogenous, predominantly hyperechoic lesion measuring 40x51x54mm in the myometrium of anterior lower uterine segment extending to cervical stroma. The lesion showed posterior acoustic enhancement and internal anechoic cystic areas. No internal vascularity was appreciated on color Doppler. The lesion was

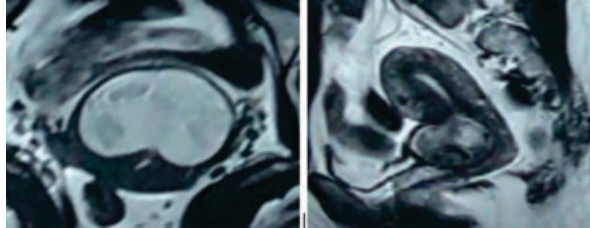
distant from the endometrial and endocervical canal and extended outwards into the uterovesical region.

Endometrial thickness was normal. Both ovaries showed normal morphology.

Possibility of degenerated uterine fibroid was considered and MRI was done for further characterisation of the lesion. MRI revealed a lobulated mass lesion in the anterior wall of lower uterine segment, extending along the scar niche. The lesion showed heterogenous hyperintense signal on T2WI with hyperintense signal on T1WI (sub-acute blood). No significant post contrast enhancement was seen. Impression of a scar site endometriosis was made.

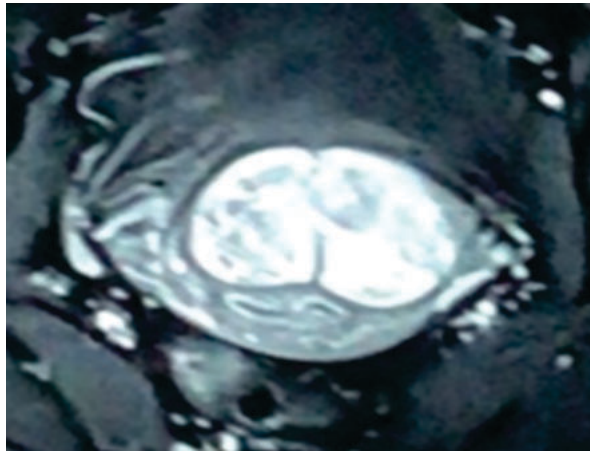


[A] Transabdominal ultrasound shows heterogenous hyperechoic lesion in the anterior wall of lower uterine segment. [B] TVS shows heterogenous predominantly hyperechoic lesion within the myometrium of anterior lower uterine segment extending to cervical stroma, distant from the endometrial and endocervical canal. [C] The lesion showed posterior acoustic enhancement and internal anechoic cystic areas. The lesion is seen extending outwards into the uterovesical region.



D.

E.



F.

[D] T1WI showing a hyperintense lobulated mass lesion in the anterior wall of lower uterine segment. [E] The lesion showed heterogenous hyperintense signal on T2WI (sub-acute blood) with hypointense fibrous bands. [F] No significant post contrast enhancement was seen.

After the radiological work-up, the patient underwent diagnostic laparoscopy, which revealed a lobulated cystic mass in the lower uterine segment, with oozing of chocolate brown material on compression. No other endometriotic deposits were seen anywhere in the pelvis. As the mass was deep-seated in the lower uterine segment, a laparotomy was decided upon and total abdominal hysterectomy with ovarian conservation was performed. The post-operative period was uneventful. Histopathology confirmed the presence of clusters of endometrial glands surrounded by endometrial-like stromal cells.

DISCUSSION

Uterine scar endometriosis is primarily related to previous surgery and may develop in months to years. The mass increases in size during menstruation and becomes symptomatic. It can resemble fibroids or other solid-like tumors, which is why careful and precise examination is needed. The first imaging modality we used in this case was ultrasonography that is easily available, reliable and cost-effective to diagnose [7]. We performed MRI that made the diagnosis clearer. Imaging helped to determine the location and extension of the lesion and characterized the lesion as cystic with hemorrhagic contents. The diagnosis was confirmed by the histopathological examination of the excised tissue.

Medical treatment by hormone suppression has been advocated for symptomatic relief [8] but it only gives partial relief and recurrence often occurs after the cessation of

medication [9].

CONCLUSION

In any women of reproductive age with lower abdominal pain and solid appearing mass lesion at the uterine scar from previous obstetric or gynaecologic surgery, uterine scar endometriosis should be considered.

Consent

Informed consent was taken from the patient to publish this case report and accompanying images.

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