Robert’s uterus: a rare mullerian anomaly mystery unfolded

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INTRODUCTION

Mullerian anomalies are rare and fascinating. The incidence being 0.1-3.5% among general population and there is increased incidence among recurrent aborters up to 5-10%.¹ These patients present with progressive dysmenorrhea. Mullerian anomalies are associated with renal anomalies in 30% of the cases. If diagnosis is not made in the earlier stage, it will lead to repeated unnecessary surgeries. These anomalies are also associated with repeated reproductive failure. Here, authors are presenting a case of Robert’s uterus, a rare type of uterine anomaly, where there is asymmetric obstructed lateral fusion defect. This patient had undergone multiple surgeries before the correct diagnosis was made. American fertility society (AFS) classification of mullerian anomaly does not describe this anomaly. Septate uterus belonging to AFS class V is the commonest anomaly and septum is usually partial or complete. Atypical septum is usually very rare and this is named as Robert’s uterus. ESHRE/ESGE classification explains this anomaly as U2U6C0V0.

CASE REPORT

Miss. M, 19-year-old attained menarche at the age of 14 years. Menstruation was uneventful for 1 year. Then she developed dysmenorrhea which was progressive in
nature. Her cycles were regular. She was diagnosed to have right ovarian cyst and haemato salphinx for which she underwent right salphingo oophorectomy in the year 2008 through laparotomy. The ovarian mass was diagnosed as endometrioma. Her pain did not subside and dysmenorrhea continued even after the surgery. Again in 2013, she underwent laparoscopy and adhesiolysis. Pain persisted and she consulted a gynecologist, who suggested USG which showed hypo echoic mass in the right side of the uterus. Probable diagnosis of right endometrioma or haematometra was made. She was posted for third surgery. Laparotomy was done, where right side of the uterus had haematometra which was drained by an incision over the right side cornual region. Right ovary and tube were absent and left side tube and ovary were normal. She was started on depot provera which kept her amenorrhoeic till she completed her school studies. Then she stopped depot provera. After 3 months she regained her menstrual cycle with severe dysmenorrhea. With this history she reached us.

Ultra-sonography done at study centre also revealed a haematometra on right horn, which compressed the left horn of the uterus and a patent vagina (Figure 1). Left ovary was normal and right ovary could not be imaged. Screening of the abdomen was normal.

Her general condition and general examination were normal. Abdominal examination revealed only lower abdominal tenderness and no mass was felt. She had already done MRI outside, which showed a hypo-echoic mass in the right side of the uterus. Left horn of the uterus was normal communicating with the vagina. Right ovary was absent. Left ovary was normal. Both kidneys were normal.

![Figure 1: USG of right side hematometra and left horn of the uterus with the patent vagina.](image1)

![Figure 2: Laparoscopic view.](image2)

![Figure 3: Hysteroscopic view.](image3)

![Figure 4: (a, b) Hysteroscopic resection.](image4)

![Figure 5: Relook hysteroscopic view.](image5)
Robert’s uterus was first reported in the year 1969. Only very few cases have been reported in the literature. This is characterized by a complete septum which is atypical where the septum instead of entering into the cervical canal, it curves towards the lateral wall and forms a non-communicating hemiuterus. Other horn has communication with the normal cervix and vagina. Non-communicating horn develops hematometra once the menstruation starts. Due to obstruction, patient can develop hematometra, hematosalphinx and even endometrioma on the ipsilateral side. This is what has happened to this patient and she had right salpingo oophorectomy for haematosalphinx and endometrioma. The external morphology of the uterus is often normal except for slight asymmetry at the fundus. When a young teenager reports with progressive dysmenorrhea, authors have to think about Mullerian anomaly. Patients usually present in post-menarcheal period with unilateral hematometra causing dysmenorrhea.

The modalities for diagnosis are MRI, CT, USG and hystero laparoscopy. MRI provides excellent tissue characterization helping in differentiating septate from bicornuate uterus and also in diagnosing asymmetric septate uterus. 3D USG/MRI with the help of new ESHRE/ESGE classification system helps to obtain a definite diagnosis of these complex anomalies. High index of suspicion should be there. Management depends upon the situation. Surgery can be done by open or minimally invasive method.

Hysteroscopy is the ideal choice for diagnosis and resection of the atypical septum, as it is minimally invasive. Uterine volume is also maintained. Surgery can also be done by laparotomy or by laparoscopy, which involves drainage of hematometra and excision of blind non-communicating hemiuterus taking care to maintain the integrity of functional communicating hemiuterus and cervix. In order to avoid inappropriate management, gynecologists should be aware of this rare entity while evaluating cases of severe progressive dysmenorrhoea in young girls. Prompt early diagnosis and surgical correction are essential to avoid future morbidity due to endometriosis. Few cases of successful pregnancies have reported following corrective surgery. Very rarely pregnancy in non-communicating horn of Robert’s uterus can occur due to trans peritoneal migration of sperms.

CONCLUSION

This case highlights Mullerian anomalies have to be considered when young girls present with severe progressive dysmenorrhoea and diagnosis remains a challenge for the clinicians. Gynaecologists should be aware of this rare entity while evaluating such cases. Prompt early diagnosis and surgical correction are
essential to avoid future morbidity in the form of repeated unnecessary surgeries.

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