Robert’s uterus with menstrual retention – a rare mullerian anomaly

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INTRODUCTION
Maldevelopment of the mullerian ducts occurs in a variety of forms, and each anomaly is distinctive. The incidence of Mullerian duct anomalies in general population is 0.1-3.5%, but much higher in patients with recurrent pregnancy losses (5-10%). The incidence has been increasing due to the availability of better imaging facilities. According to American Fertility Society classification of uterovaginal anomalies Class III, disorders of lateral fusion of the mullerian ducts can be classified as symmetric-unobstructed and asymmetric-obstructed disorders. Amongst these, the latter are even rarer. Robert’s uterus is one such asymmetric obstructed lateral fusion defect. It is a rare variant septate uterus characterized by a complete septum and non-communicating hemiuteri with a blind cavity.

KEYWORDS
Robert’s uterus, menstrual retention.

CASE REPORT
An 18 year old unmarried female was admitted with chief complaints of pain in lower abdomen since 6 months which was aggravated since 3 days. Her menstrual cycles were regular, but she had scanty bleeding with dysmenorrhoea, nausea and vomiting during menses since menarche. Her past history revealed she had undergone laparotomy for similar complaints 3 years ago; however records of the surgery were not available. On examination, she was found to be pale. The development of secondary sexual characters was normal for her age. Inspection of the abdomen showed lower abdominal fullness and a midline vertical scar of previous laparotomy. On palpation, a 24 weeks irregular mass was arising from pelvis and extending to hypogastric, left iliac and left lumbar regions. The mass was tender on palpation and its mobility was restricted. Perineal examination showed that external genitalia were normally developed and hymen was normal. Vaginal examination revealed an annular vaginal ring felt one inch above the introitus and a single cervix was felt above that. The length of the vagina was normal. Her preoperative investigations were within normal limits. The ultrasound was suggestive of an enlarged uterus measuring 13.3x7.5x6.7 cm with volume of 370 ml, showing thick fluid collection within the uterus and extending lower down to the cervix. There was evidence of multiple cystic masses with similar internal echotexture closely placed to the uterus and extending up to left lumbar region measuring 7.5x5cm, 5.5x3.8cm and 4.7x3.9cm. The findings were consistent with haematometra with multiple hemorrhagic cysts. The ovaries were not visualized separately. Kidneys were normal in size and position. A provisional diagnosis of unicornuate uterus with functional non-communicating rudimentary horn with menstrual retention associated with multi-loculated chocolate cyst was made. Exploratory laparotomy was planned.

Abdomen was opened through previous laparotomy scar. Intraoperative findings showed an irregularly enlarged uterus with a normal right half and normal adnexa, while left hemi uterus was enlarged measuring 13x10 cm. The fundus of both the halves was in continuity. Left tube was massively enlarged, congested and densely adherent to a large, thick walled cyst of ipsilateral ovary which was measuring 12x12cm.

The diagnosis of Robert’s uterus with menstrual retention was made. To confirm the diagnosis, a small nick was given on the left hemiuterus and it was found that it was not communicating with the cervix and there was a thick septum between the two hemiuteri.

Considering the thick septum between the two halves and a large tubo-ovarian mass, decision was taken to excise the left hemiuterus and ipsilateral adnexa leaving the right hemiuterus with adnexa undisturbed. After adhesiolysis, the left hemiuterus with adnexa was excised. Right hemiuterus was reconstructed by suturing the incised myometrium in two layers. Left round ligament was sutured to the newly created left cornu. After achieving haemostasis, abdomen was closed in layers. Patient received two units of red cell concentrate. Post-operative period was uneventful and the patient was discharged on 10th day.

DISCUSSION
Robert’s uterus is a unique mullerian anomaly. It presents with two cavities, one of which is blind containing retained secretions presenting with severe dysmenorrhoea and unilateral haematometra soon after menarche. Cryptomenorrhoea can be overlooked as the diagnosis because there will be cyclic menstruation from the opposite side. It is important to make the diagnosis as soon as possible, as retrograde menstruation and endometriosis may develop.
as in our case. Due to the extensive endometriotic changes, thick septum and enlarged hemi uterus in our patient, we could not salvage the affected adnexa. The other treatment options available are hysteroscopic septum resection if septum is thin or metroplasty.

CONCLUSION

Pediatric surgeons and gynecologists should be aware of this atypical obstructive mullerian malformation and its management in order to avoid inappropriate management of these patients. If our patient had received definitive treatment during the first laparotomy, second operation could have been avoided and also her tube and ovary could have been saved, which will have an impact on future reproductive and endocrine function.

REFERENCES