

# A Case of Rare Mullerian Anomaly - Functional Rudimentary Uterine Horn

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## Abstract

A 19 year old nulligravida presented with progressively increasing dysmenorrhoea. A pelvic mass was suspected which on exploratory laparotomy was found to be a rudimentary horn (haematometra, haematosalpinx and endometriosis). Unicornuate uterus with a rudimentary horn is susceptible to many gynaecologic and obstetric complications. Haematometra, Chronic pelvic pain, endometriosis, infertility are some of the complaints in women with unicornuate uterus.

## Introduction

The unicornuate uterus is caused by nondevelopment of one mullerian duct. The condition usually is associated with various degrees of rudimentary horn connected to the unicornuate uterus when one of the ducts develop only partially. Various series, shows the rarity of such an anomaly, it has been reported to be of incidence of 0.06%.<sup>1</sup>

It is generally considered that the presence of a noncommunicating cavitary rudimentary horn (Buttram and Gibbons class IIA, B) carries a poor reproductive prognosis and increases the risks of endometriosis and cornual pregnancy.<sup>2</sup>

Mullerian anomalies are commonly associated with renal, spinal and cloacal anomalies. There is particular association of unilateral renal agenesis or ectopia, uterine duplication or unicornis, and vaginal agenesis.<sup>3</sup>

## Case Report

A 19 year old nulligravida presented in the gynaecological out patient department with onset of dull aching pain in the left iliac fossa since 3 years. The patient had spasmodic progressive dysmenorrhoea since menarche, i.e. from 14 years. The patient complained of feeling a mass in the lower abdomen and deep dyspareunia since past one year.

Her menstrual cycles were regular since menarche with moderate flow but with progressively increasing dysmenorrhoea. Patient had been married since one year. Patient had imperforate anus at birth for which she had undergone a series of corrective surgical procedures during her neonatal period.

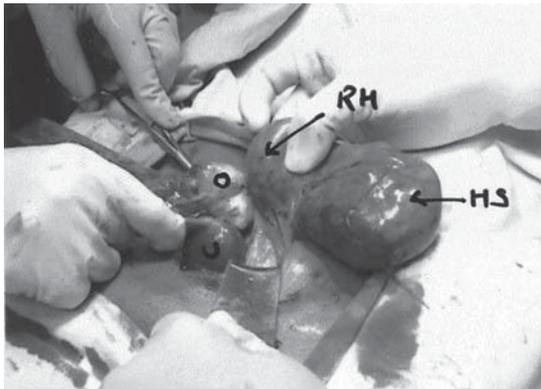
Patient had been on antispasmodic pain killers for her dysmenorrhoea. An ultrasound was done for the mass in the pelvis which was diagnosed as being a complex ovarian cyst. The patient was started on oestrogen and progesterone combination pills.

When the patient presented in the gynaec outpatient department, a thorough examination revealed a tender cystic mass palpable in the left iliac fossa 6 cm X 5 cm. A bimanual per vaginal examination confirmed the findings with a retroverted normal size uterus.

All routine examinations revealed no obvious abnormality except for tumour marker Ca-125 which was 138 IU/ml. Beta hCG was negative. A repeat pelvic ultrasound revealed a complex irregular mass of 6.5 cm X 5 cm X 4 cm with solid and cystic component in the left adnexa, where ovary could not be differentiated.

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*Fig. 1 : Intraoperative photograph showing right unicornuate uterus with normal tube and ovary attached to left rudimentary horn and haematosalpinx by fibrous band*

A case of tubo-ovarian mass of infective or tuberculous pathology was suspected as primary diagnosis. An ovarian tumour was kept in mind as differential diagnosis.

A diagnostic laparoscopy was performed which revealed a right unicornuate uterus with patent right fallopian tube and normal right ovary. The unicornuate uterus was connected to rudimentary horn on the left side with a long fibrous band (Fig. 1). A 7 cm X 3 cm right haematosalpinx and 4 cm X 3 cm X 2 cm endometrioma involving the right ovary was noted. Endometriotic lesions were seen over the peritoneum mainly on the left side with partial obliteration of the cul-de-sac with involvement of sigmoid colon by adhesions which were flimsy.

Due to some infrastructural problems a exploratory laparotomy was performed over the preference for operative laparoscopy. Hemihystrectomy on the left side with removal of haematosalpinx and left ovary was performed. Endometriotic lesions over the peritoneum were coagulated and adhesions involving the bowel and cul-de-sac were lysed.

Patient had an uneventful postoperative recovery. Patient is on follow up regularly being kept on prophylactic danazol treatment 3 months.

## **Discussion**

Despite numerous theories regarding the pathogenesis of endometriosis, retrograde menstruation appears to be a vital component in a vast majority of cases. Yet the near

universality of retrograde flow in dialysis patients and women undergoing laparoscopy at the time of menses implicates other factors in the development of endometriosis. Studies have demonstrated that women with functioning endometrium, patent tubes and outflow obstruction have a very high rate of endometriosis. Thus, an increase in the amount of retrograde menstruation will lead to a greater rate of endometriosis.<sup>4</sup>

It is important to keep an index of suspicion in high risk groups of uterine/mullerian anomalies regarding other common spinal, cloacal and renal anomalies.<sup>3</sup>

The most common reasons for hospitalization in women, who were found later to have rudimentary horns, were reported to be ectopic pregnancy (25%), chronic pelvic pain (20%), pelvic tumour (20%) and primary infertility (15%).<sup>3</sup>

Based on various datas,<sup>4-6</sup> radical management is recommended in case of non-communicating cavitary rudimentary horn, to avoid risk of endometriosis. Although, it is not clear whether or not the prognosis of a pregnancy is compromised by the presence of a rudimentary horn. Associated salpingectomy is always advisable to prevent the risk of tubal pregnancies.

## **Conclusion**

Triad of dysmenorrhoea beginning at menarche, increasing severity of dysmenorrhoea and unilateral pelvic mass is a strong evidence of congenital mullerian anomaly. Such a strong association requires a thorough investigation which should include an MRI and even a diagnostic laparoscopy. A radical surgical removal of the anomaly is still the main stay of managing such an anomaly. The basic objective of surgical resection of functional non communicating rudimentary horn are pain relief and maintenance of

reproductive capacity. Minimal access surgery is less morbid and would give the same efficient result in expert hand.

#### References

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**KK Aggarwal, Asian Journal of Clinical Cardiology, 2007; 10 : 5-6.**