

# A Case of Unicornuate Uterus with Hematometra in Rudimentary Horn (Canalised and Non Communicating) Presenting as Endometriosis

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### Abstract

**Background:** Anomalies of uterus may be acquired or congenital and present a diagnostic challenge due to various morphological presentations. They can present as abnormalities of menstrual cycle, pelvic pain, infertility or complications in pregnancy. Prevalence of mullerian anomalies is 0.5- 6%. According to American fertility society,1988; the most common mullerian anomaly is unicornuate uterus with a non communicating rudimentary horn of variable development (Type II b). Arrested development of one of the mullerian ducts results in unicornuate uterus. If the non communicating horn contains functional endometrium, the woman presents with abdominal pain with or without mass. The symptoms mimics that of endometriosis. Here we present a case of unicornuate uterus with hematometra in non communicating rudimentary horn, presenting as endometriosis.<sup>1</sup>

**Keywords:** Unicornuate, rudimentary horn, non communicating , hematometra, endometriosis.

### Case Study

A 25 year old lady came with a complain of chronic pain in lower abdomen since 2&1/2 years,not relieved with oral analgesics and complain of dyspareunia.

She had history of taking tablet Dinogest in past for 3 months, but her pain was not relieved. The pain had aggravated since past 15 days for which she was taking injection Diclofenac.

Her Last menstrual period was on 27/06/2022, with previous regular cycles of 22-25 days interval and 5 days duration.

She was P2A2L2. In her first pregnancy she had a spontaneous abortion of 5 month period of gestation. In 2nd pregnancy she delivered a preterm male child of 7 month gestational age. In her 3rd pregnancy she delivered a term male child vaginally. She had a medical abortion at 2 month gestation in her last pregnancy following which she had bilateral tube ligation 1 year back.

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On examination, per abdomen was soft. On per vaginal examination the uterus was bulky and anteverted and had a tender mass in the anterior fornix.

She had imaging evaluation of uterus and adnexa, her USG Scan revealed a hypoechoic mass measuring 4.1cm×3.5cm adjacent to fundus of uterus, suggestive of subserous fibroid. She also had a left ovarian cyst 3.9cmx 2.5cm with septations. Her right ovary was not visualized on scan.

Her blood investigations were within normal limits, viral markers negative, but her Ca125 level was 61.46 IU/ml. She was planned for laparotomy in view of endometriosis. On opening the abdomen, a diagnosis of unicornuate uterus with a rudimentary horn was made. As her family was complete Total abdominal hysterectomy and left sided salpingoopherectomy was done. On section of the rudimentary horn was found to be canalised and with hematometra .

## Discussion

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Congenital Uterine anomalies result from arrest of fusion of mullerian ducts in the fetal life. Failure of mullerian ducts between 6th and 9th week lead to uterine aplasia, failure to fuse between 10th and 13th week cause duplication ( uterine didelphys, bicornuate uterus), and failure of reabsorption of midline septum between 14th and 18th week leads to septate uterus. Arrested development or incomplete development of one of the mullerian ducts results in a unicornuate uterus. Women with a unicornuate uterus have an increased incidence of infertility, endometriosis and dysmenorrhea.<sup>1-3</sup>

They have a high risk of preterm labour (40%) and about half of them are lost in the first two trimesters. Akar reported live birth rate of 29% in women with unicornuate uterus.<sup>5</sup>

The uterine malformations are classified according to the embryology mechanism leading to their formation. Various classifications schemes exist, but most common was proposed by Buttram<sup>6</sup> and adapted on 1988 by

the American Fertility society ( AFS), now American Society of Reproductive Medicine. Our patient had Type II b (AFS) uterine malformation.

## Diagnosis and Management

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On physical examination, the uterus is usually markedly deviated on the left or right , reflecting the development failure of one of the mullerian ducts.

Diagnostic investigations are difficult in developing countries. The Unicornuate uterus can be diagnosed by HSG, ultrasonography or MRI. Rudimentary horn in association with unicornuate uterus can be better diagnosed by 2D sonography (presence of a horn tissue between the normal hemicavity and the contralateral ovary), but 3D sonography or MRI seem to be more precise.<sup>1-5</sup>

Usually patients with uterine malformations present with obstetrics complications like mid trimester abortion, preterm labour, malpresentations, ectopic pregnancy in rudimentary horn. In our case also, the patient had a midtrimester abortion and preterm labour, but she remained undiagnosed. She had an unusual presentation mimicking endometriosis for which she was further evaluated and during laparotomy, the diagnosis of unicornuate uterus with non communicating rudimentary horn was made.

Regarding management, resection of non communicating horn is recommended. In our case the patient completed her family and had complain of chronic pelvic pain not relieved by medications, thus total abdominal hysterectomy with left sided salpingoopherectomy was done.

## Conclusion

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Patients with non communicating rudimentary horn of unicornuate uterus can present with chronic pain abdomen because of accumulation of menstrual blood due to presence of active endometrium. When patient comes with lower abdominal pain with pelvic mass, hematometra with congenital malformation of uterus can be considered as one of the differential diagnosis.



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