

## A Case Report

# Case of Hematometra Hematosalpinx- An Atypical Presentation

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## Abstract-

Hematometra and hematosalpinx is collection of blood in the uterine cavity and fallopian tube respectively. It is common in cases of obstructive uterine anomalies. We are presenting here a case of large hematosalpinx with hematometra in rudimentary horn with atypical presentation. The rudimentary horn may be nonfunction in that condition no management is required. However, in the case of rudimentary horn with functional endometrium resection of the rudimentary horn is a must, as it can lead to hematometra, hematosalpinx, malpresentation, frequent abortion, and premature labor, infertility, ectopic pregnancy in rudimentary horn which can even lead to mortality due to ruptured rudimentary horn having pregnancy. Therefore, early diagnosis is crucial but difficult due to the absence of symptoms.

**Keywords:** Unintended Pregnancies, Unwanted Pregnancies, Induced Abortions, Maternal Mortality, Contraception

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## Introduction-

Hematometra and hematosalpinx is collection of blood in the uterine cavity and fallopian tube respectively.(1) It is common in cases of obstructive uterine anomalies. Congenital anomalies of the female genital tract are rare. The prevalence of it is around 0.06 to 38% depending on complaints and diagnostic modalities used.(2) These anomalies are mostly present as infertility or recurrent pregnancy losses. Sometimes uterine anomalies are diagnosed incidentally.

Unicornuate uterine anomaly is a fusion anomaly and develops due to incomplete development of one müllerian duct classified as a type II anomaly in the American Fertility Society classification. The American Society of Reproductive Medicine (ASRM) Müllerian Anomalies Classification 2021 has classified these anomalies into 9 groups, of which the third group is the unicornuate uterus, under which there are five related anomalies.(3) Mostly unicornuate uterus present as infertility or abortions. Rarely they can also present as dysmenorrhea and the lump in the abdomen (R/L unicornuate uterus with R/L distal uterine remanent with functional endometrium of ASRM classification)

We are presenting here a case of large hematosalpinx with hematometra in rudimentary horn with atypical presentation.

## Case Report-

21 years, unmarried female presented to us with dull aching pain and a lump in her lower abdomen for 4 to 5 months. Her age of menarche was 16 years. Her menstrual cycles were regular, and her menstrual blood flow was average without dysmenorrhea. There was no relation of abdominal pain with menstrual cycles. There was no history of trauma, amenorrhea, tuberculosis, or pelvic inflammatory disease. On general examination, BMI was 18.6 Kg/m<sup>2</sup> and mild pallor was present. On per abdominal examination, the abdomen was non-tender, and lower abdominal fullness was present more on the left side. On per rectal examination, the rectal mucosa was smooth and some mass was felt through the mucosa. Ultrasonography of the lower abdomen showed a hypoechoic adnexal mass of 10 X 12 centimeters with septations. Her computed tomography revealed a well-defined cystic structure measuring 9.8 X 6.6X3.8 centimeters in the right adnexa and 3.8X3.1 centimeters in the left adnexa suggestive of right tuboovarian mass (Figure 1A and B). Magnetic resonance Imaging was not done due to cost constraints. Her CA 125 and all the germ cell tumor markers were within normal limits. The patient was planned for exploratory laparotomy in view of a large tubo-ovarian mass. On laparotomy, the uterus with a non-communicating rudimentary horn with hematometra and hematosalpinx on the right side was present (Figure 1C). Removal of hematosalpinx with a rudimentary horn having hematometra was done. On the left side, a hemorrhagic cyst was present for which cystectomy was performed. All the tissues were sent for histopathological examination. The post-operative period was uneventful, and the patient was discharged on the third postoperative day. The patient was doing well in the follow-up period of two months and was symptom-free.

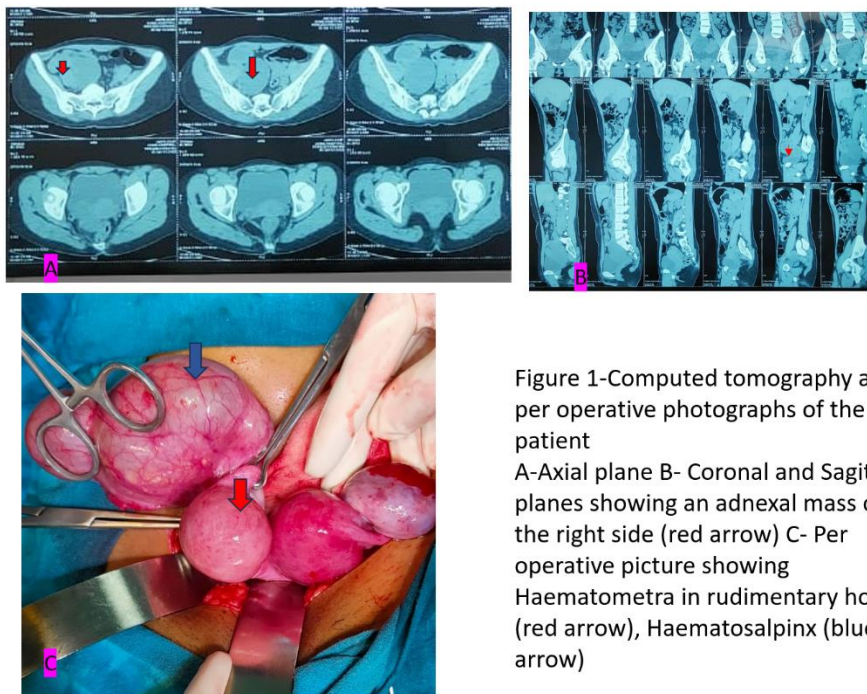


Figure 1-Computed tomography and per operative photographs of the patient

A-Axial plane B- Coronal and Sagittal planes showing an adnexal mass on the right side (red arrow) C- Per operative picture showing Haematometra in rudimentary horn (red arrow), Haematosalpinx (blue arrow)

## Discussion-

Uterine anomalies sometimes are very complex and difficult to understand by providers. The classification given by AFS in 1988 was simple, however, it has been criticized for its focus primarily on uterine anomalies, with the exclusion of those of the vagina and cervix, its lack of clear diagnostic criteria, and its inability to classify complex aberrations. The recent classification given by ASRM in 2021 is an elaboration and update of the AFS classification. It includes all categories of anomalies and is easy to use and helps in better management plans for patients. It has divided anomalies into 9 named anomalies and has different subdivisions under each anomaly but no numbering is given. Under subpages, it has important presentations, diagnostic modalities, and management plans for easy use.(3) The prevalence of a unicornuate uterus with a rudimentary horn is around 1 in 100,000.(4) The rudimentary horn may be nonfunction in that condition no management is required. However, in the case of rudimentary horn with functional endometrium resection of the rudimentary horn is a must, as it can lead to hematometra, hematosalpinx, malpresentation, frequent abortion, premature labor, and infertility, ectopic pregnancy in rudimentary horn which can even lead to mortality due to ruptured rudimentary horn having pregnancy. Therefore, early diagnosis is crucial but difficult due to the absence of symptoms.

In their study, Jayasinghe et al. found that most women (78%) having unicornuate uterus with rudimentary horn remained symptomless for a long time often and presented in 3<sup>rd</sup> decade of life.

This is similar to the case presented by us, in which the patient was asymptomatic and presented with atypical symptoms of dull aching pain and a lump in the abdomen which was not related to menstruation.

In this case, the patient presented with dull pain in the abdomen, not related to menstruation which was in contrast to the cases reported by Suryavanshi SV and Vikram Khanna et. al.

It is very important to make a preoperative accurate diagnosis for better management. Magnetic resonance Imaging is considered the gold standard investigation for uterine anomalies and it gives objective and reliable three-dimensional information about anatomy. It is less informative about the tubal anomaly. However, it is not available everywhere and is costly.(5)

In the case reported by Suryavanshi SV and also by Vikram Khanna et. al, the preoperative diagnosis of a unicornuate uterus with a rudimentary horn was on the basis of an MRI report.(2,6) In our case, MRI was not done as relatives were not ready for the same so preoperative diagnosis was in dilemma.

## Conclusion-

Here we presented the case of hematometra and hematosalpinx in rudimentary horn with atypical presentation. This case also highlights the need for MRI for early diagnosis of uterine anomalies for better management. Resection of a functional rudimentary horn should be done in these cases to prevent further complications.

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