

# Unicornuate Uterus with Noncommunicating Functional Rudimentary Horn: A Rare Mullerian Anomaly

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## Abstract

Unicornuate uterus with non communicating functional rudimentary horn is a rare variant of mullerian duct anomalies and associated with many obstetrical & gynecological complications throughout a women reproductive life. Teenagers presenting with severe dysmenorrhea should always be suspected for obstructive mullerian anomalies because early diagnosis can prevent serious complications like endometriosis, hematometra, pyometra and infertility. The patient of unicornuate uterus with rudimentary horn should be treated with excision of rudimentary horn to decrease the serious complications in future. We have seen five teenager girls of this rare anomalies presented with severe dysmenorrhea.

**Keywords:** Mullerian Anomaly, Unicornuate uterus, Dysmenorrhea, Endometriosis

## I. INTRODUCTION

Unicornuate uterus with non communicating functional rudimentary horn is a rare variant of mullerian duct anomalies and result from defective fusion or maturation of two mullerian ducts (1). This anomaly is associated with many gynecological and obstetrical complications at any stage of reproductive life. The rudimentary horn may consist of a functional endometrial cavity or present as a small solid lump of uterine muscle with no functional endometrium. I have seen five teenager girls of this rare anomalies presented with severe dysmenorrhea in a two yrs (June 2013-2015) duration. Three cases were managed in my hospital & two case lost follow up after diagnosis.

### A. Case 1

A 24 yrs old, unmarried girl admitted in the emergency of a tertiary care hospital of Haryana with acute pain abdomen & fever for last one month. She had regular menstrual cycles with severe dysmenorrhea since menarche. On her examination, a 10x8 cm pelvic mass was detected with diffuse tenderness in the lower part of the abdomen. Abdominal Ultrasonography revealed a unicornuate uterus with hematometra, hematosalpinx in left rudimentary horn and

endometrioma of left ovary which was confirmed by MRI. Exploratory laparotomy was done. Intraoperatively unicornuate uterus with non-communicating left horn of 4x3cm was seen. Omentum was found adherent to the anterior wall of the uterus. A large endometrioma of 7x10cm containing chocolate colored fluid in left ovary with hematosalpinx and 3x2cm simple follicular cyst in right ovary was seen. Excision of rudimentary horn with left sided salpingo-oophorectomy and enucleation of right ovarian cyst was done.



Fig.1 Endometrioma of left ovary

### B. Case 2

19 yrs old, unmarried girl presented to outdoor deptt of gynecology with pain in lower abdomen radiating to groin for last four yrs and foul smelling discharge per vaginum. Her menstrual cycles were regular & associated with severe dysmenorrhea since menarche. On examination moderate anemia with pelvic mass (4x5cm) was detected. Ultrasonography showed unicornuate uterus with hematometra in right rudimentary horn & 2x2 cm endometriotic cyst of right ovary, confirmed by MRI. Exploratory laparotomy followed by excision of right rudimentary horn with right sided salpingectomy, enucleation of endometriotic cyst of right ovary with ovarian reconstruction was done.



Fig.2 Simple cyst of right ovary with endometrioma of left ovary

### C. Case3

17 yrs old unmarried girl presented in the outdoor department of Medicine with pain abdomen and gradually increasing mass per abdomen for last eight months. Pain was continuous, dull ache in nature & aggravated with movements. She attained menarche one yr back and had regular menstruation with severe dysmenorrhea. Her routine investigations were normal & ultrasonography revealed unicornuate uterus with non communicating functional left side rudimentary horn forming hematometra, hematosalpinx and endometrioma (5x4) cm of left ovary & left side ectopic kidney. Exploratory laparotomy followed by excision of rudimentary horn and left sided salpingo- oophorectomy was done.

Post operative period was uneventful and histopathological examination confirmed rudimentary horn with functional endometrium in all three cases.



Fig.3 Rudimentary horn with endometrioma

Unicornuate uterus with non communicating functional rudimentary horn belongs to group II b mullerian anomalies according to AFS classification. (2) The true prevalence of this anomaly is not known due to case reports. The estimated prevalence of unicornuate uterus is varies 0.2%-0.6%, between fertile to infertile population(3). Although unicornuate uterus with functional rudimentary horn is a rare mullerian anomaly, it is associated with many complications throughout a women reproductive life. Teenagers presenting with severe dysmenorrhea should always be suspected for obstructive mullerian anomalies because early diagnosis can prevent serious complications like endometriosis ,hematometra, pyometra , primary infertility ,torsion of abnormal portion of fallopian tube ,bad obstetrical history due obstetrical complications like ectopic pregnancy, recurrent Pregnancy loss, preterm labor & miscarriage .MRI is the gold standard imaging modality for diagnosis of mullerian abnormalities(4). Mullerian abnormalities has association with renal and skeletal anomalies ,so complete preoperative evaluation is essential. The patient of unicornuate uterus with rudimentary horn should be treated with excision of rudimentary horn to decrease the serious complications in future and fallopian tube on the side of rudimentary horn should be removed to avoid tubal pregnancies(5). Ipsilateral ureter should also be identified before dissection because it usually found closer to uterine body and chance of uretric injury is more.

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### II. DISCUSSIONS