

## A Case of Non-Communicating Uterine Horn Containing Functional Endometrium

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### Abstract

Uterine anomalies are very rare. They can present with complains of amenorrhoea, dysmenorrhoea, bad obstetrical outcome and infertility etc. Unicornuate uterus with rudimentary horn is very rare. The incidence of this is 1/100,000. Normally rudimentary horns are non-functional and non-communicating. But if they have functional endometrium they can develop hematometra. We are presenting a case of hematometra and pain in a patient with rudimentary non communicating horn with functional endometrium. Rudimentary horn should be kept as a differential diagnosis in pelvic pain.

**Keywords:** Unicornuate uterus; Rudimentary horn; Dysmenorrhea

### Introduction

Uterine anomalies are very rarely seen. Unicornuate uterus is a very rare uterine anomaly. The incidence of congenital uterine anomalies in fertile population is 1/200 to 1/600. The incidence of rudimentary horn is very very rare (1:100,000). These uterine anomalies are either diagnosed incidently or the patient may present with obstetrical or gynaecological problems. The patients commonly presents with amenorrhoea, dysmenorrhoea, lump in abdomen (hematometra), infertility. The other problems are recurrent abortions, IUGR, preterm labour in our patient there was pelvic pain and hematometra.

### Case Report

The patient is a 17-year-old, unmarried, girl, admitted to the emergency ward of the Banaras Hindu University Medical Faculty with severe dysmenorrhoea and lump abdomen. Her age at menarche was 13, and she had severe dysmenorrhea since age 14. Her menstrual cycle was 30 days, and her menstrual period was about 3 to 5 days with a normal amount of bleeding.

On general examination her blood pressure was 100/70 mm Hg, with heart rate 92 per minutes. Her secondary sexual characters was well developed. On abdominal examination tenderness in right iliac fossa. On pelvic examination vulva appears normal with intact hymen. On per rectal examination uterus was normal sized. She had an approximately 4x5 cm palpable mobile, tender, hard mass in the right adnexal region.

Laboratory values were as follows: hemoglobin 11.0 g/dL, hematocrit 38%, white blood cell count 11 000 per mm<sup>3</sup>, platelet count 155 000 per mm<sup>3</sup>. Her hCG level was not detectable. Ultrasonographic evaluation revealed two separate uterine cavities. Small volume haematometra in right side cavity with right ovarian cyst (15x12 mm). Left sided uterine cavity was normal. Her IVP report was normal with no associated urological anomalies.

The patient underwent diagnostic laparoscopic followed by laparotomy. Per-operative findings during laparoscopy were unicornuate uterus with distended rudimentary horn. The left round ligament arose from the left uterine cornual region; however, the right round ligament arose from the rudimentary horn. The non-communicating rudimentary horn attached by a thick fibrous band to the uterus was seen on the right side (Figure 1). The right uterine tube arose from the superior portion of the rudimentary horn and thickened. Both ovaries were normal in shape and sizes. No endometriotic lesions

were found in the pelvis. Exploratory laparotomy was decided and the rudimentary horn was excised by applying clamps (Figure 2). Histopathological examination of the specimen was reported as uterine rudimentary horn with functional endometrium with haematometra. The patient was discharged on the fifth postoperative day. She came in follow up her normal menses after 6 weeks.

### Discussion

Uterine anomalies presenting with pelvic pain are rare. Rudimentary horns are usually non functional and non-communicating. Mullerian duct anomalies are usually associated with urinary tract anomalies. American fertility society has divided mullerian anomalies into several classes [1,2]. Unicornuate uterus can be with rudimentary horn or without rudimentary horn. This rudimentary horn can be communicating or non-communicating. These rudimentary horns can be functional or non functional.

The patient with these anomalies can present with dysmenorrhoea [3,4], ruptured horn, ectopic pregnancy and sometime with infertility.

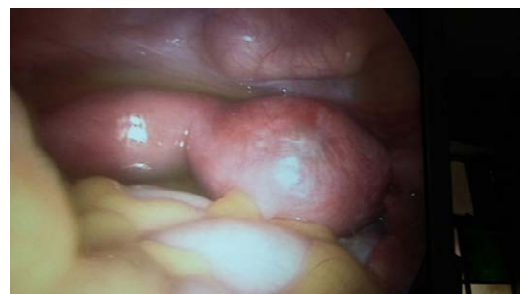


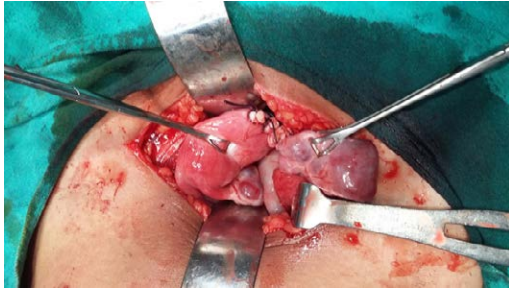
Figure 1: Superior portion of the rudimentary horn.

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Received August 22, 2015; Accepted September 18, 2015; Published September 26, 2015

Citation: Rani A, Kumari M, Shipra (2015) A Case of Non-Communicating Uterine Horn Containing Functional Endometrium. Gynecol Obstet (Sunnyvale) 5: 320. doi:10.4172/2161-0932.1000320

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**Figure 2:** Exploratory laparotomy of the rudimentary horn was excised by applying clamps.

Sometime these patient can be diagnosed by chance. The cause of pain in these patients can be because of hematometra causing distension of uterus. These patient can also have endometriosis which can cause pelvic -pain. The cause of rupture is very thin myometrial tissue in rudimentary horn. Pregnancy can occur because of transperitoneal migration of sperms.

The treatment of non communicating rudimentary horn with functional endometrium is excision of the horn either laparoscopically or by laparotomy [5-9]. Very rarely pregnancy can be there in rudimentary horn which can cause uterine rupture sometime [10]. It can prevent complications like rupture of horn due to pregnancy and also endometriosis. In our case, removal of the horn could have resulted in relief of dysmenorrhea complaint. So many studies has shown than excision is done once the diagnosis is confirmed. Especially for the younger women in the fertile period as in our case, the rudimentary horn must be excised because the intervention will prevent possible endometriosis development [11]. This will also prevent hematometra causing lump in abdomen, torsion and later on infertility.

## Conclusion

In young female patient with dysmenorrhoea with adenexal mass

then rudimentary horn with functional endometrium should be kept as differential diagnosis. These patient should be managed by expert surgeon because wrong excision of normal horn can be a big problem for the future life of patient.

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