

Case Report of Surgical Excision of Non-Communicating Rudimentary Horn of Uterus Present in Adolescent with Dysmenorrhea

Majed Alshahrani

Department of Obstetrics and Gynecology, College of Medicine, Najran University, Najran, Kingdom of Saudi Arabia
Email: alkozeem@hotmail.com

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Abstract

Unicornuate uterus with a rudimentary horn is a rare type of müllerian duct malformation. It leads to many obstetrical and gynecological complications. The mean age of presentation was the mid 20 s [1]. It is one of the differential diagnosis of dysmenorrhea in adolescent. A 19-year-old single was present with progressive severe dysmenorrhea and chronic pelvic pain after history right ovarian torsion treated by right salpingo-oophorectomy. Exploratory laparotomy was performed found unicornuate uterus with right non-communication rudimentary horn. Excised of right rudimentary horn was done. Remove of non-communication rudimentary horn will reduce symptoms of dysmenorrhea and chronic pelvic pain. Proper diagnosis and management will prevent misdiagnosis and good outcome to the patient.

Keywords

Rudimentary Horn, Dysmenorrhea, Surgical Excised

1. Introduction

The female reproductive organs develop at approximately the sixth week of gestation from the paired müllerian (paramesonephric) ducts, which fuse to create the uterus, cervix, and upper two-thirds of the vagina. Failure of fusion or normal development or incomplete medial wall resorption of the müllerian ducts can result in a variety

of congenital uterine anomalies.

Unicornuate uterus with a rudimentary horn is a rare type of müllerian duct malformation. The unicornuate uterus is a result of abnormal or failed development of one of the paired müllerian ducts. Unicornuate uterus accounts for approximately 3% - 13% of all müllerian anomalies [2] [3].

The American Fertility Society classification divides Unicornuate uterus into 4 categories: 1) unicornuate uterus with a communicating rudimentary horn, 2) unicornuate uterus with a non-communicating rudimentary horn, 3) unicornuate uterus with rudimentary horn without cavity and 4) isolated unicornuate uterus [4].

The rudimentary horn could be functional endometrium or not. It can lead to many obstetrical and gynecological complications. Besides gynecologic complications, such as endometriosis, dysmenorrhea, primary infertility, and hematometra, anomalies of the urinary system and obstetrical problems, such as malpresentation, miscarriages, and premature birth and ectopic pregnancy [5].

This report explained that the proper diagnosis and treatment of a patient with unicornuate uterus with a non-communicating rudimentary horn who had history of salpingoophorectomy was aggravated her symptoms of dysmenorrhea. Surgical resection non-communicating rudimentary horn was resolved her dysmenorrhea.

2. Case Report

The patient is a 19-year-old, unmarried. Patient was admitted to Abha General Hospital in Obstetrics and Gynecology department. Patient had history of emergency laparotomy at age of 16 years for right ovarian torsion and treated by right salpingoophorectomy. Then patient started to complain from progressive cyclic dysmenorrhea and chronic pelvic pain not response to analgesia for several times. After that patient was placed on combined pill for several month but still complain from dysmenorrhea. Exploratory laparotomy was performed by pfannenstiel incision. Inter to peritoneal cavity were the right non-communicating rudimentary horn attached to uterus. The scar of previous surgery was seen in right side of rudimentary horn. The uterus was normal with normal position fallopian tube and ovary (**Figure 1**). Decision was made for excised the right rudimentary horn by cutting and dissected it and sutured uterus part with maintain hemostais (**Figure 2**). Cross-section of rudimentary horn showed functional endometrial with material inside (**Figure 3**). The patient was discharged day 3 post-operative in good condition. The patient attended outpatient clinic after 4 month for follow up with resolved the symptom of dysmenorrhea.

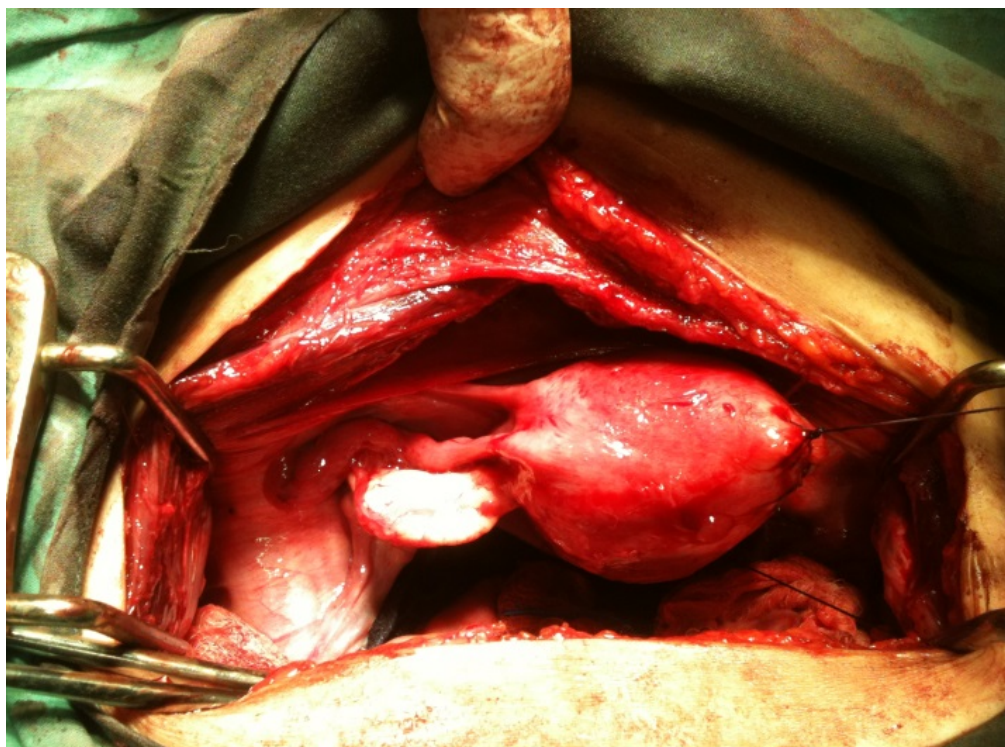


Figure 1. Normal left ovary and fallopian tube.

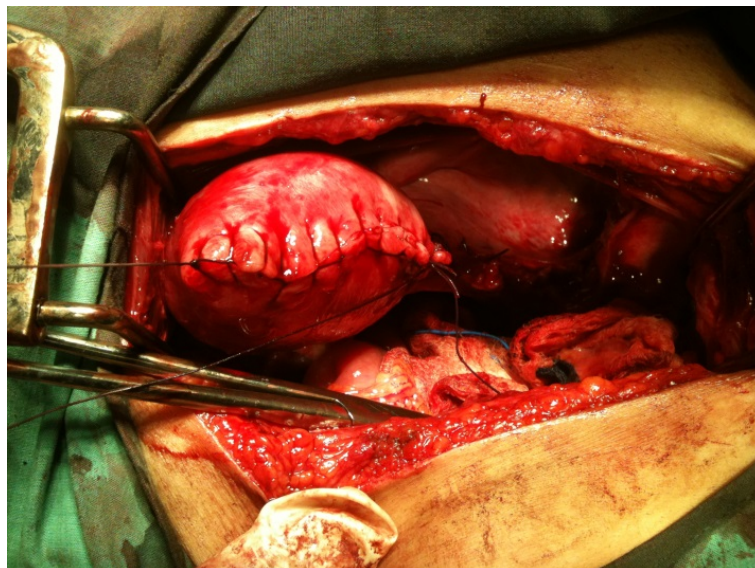


Figure 2. Sutured part of uterus after excised.



Figure 3. Cross-section of rudimentary horn.

3. Discussion

The prevalence of dysmenorrhea is estimated to be around 25% of all women and 90% of adolescent [6]. The rudimentary horn may contain functional endometrial cavity or not. Non-communicating rudimentary horns that have an endometrial cavity are the most common unicornuate subtype and are the most clinically complicated.

Women with unicornuate uterus with a non-communicating rudimentary horn usually are present with progressive dysmenorrhea and pelvic pain. The presentation can be delayed with increasing severity of dysmenorrhea, with each subsequent menstrual period as a common feature. The symptoms will interfere with quality of life and may not respond to medication like this patient. The correct diagnosis and proper management will prevent all the complications to the patient. This patient's missed diagnosis during emergency laparotomy led to progressive dysmenorrhea.

The diagnosis of uterine anomalies is difficult in some cases. It needs a non-invasive diagnostic method, such as MRI before any intervention procedure and for looking for other anomalies associated with it. MRI is a good

method for differentiation of all the different type of uterine anomaly. The MRI was not done because MRI was not available at that time of the presenting patient. This patient was presented with dysmenorrhea after salpingoophorectomy which caused obstruction of outflow of menstrual blood in functional non-communicating horn which was not improved by medication.

Surgical removal of the non-communicating horn is commonly performed to prevent complication of obstetrics and gynecology such as ectopic pregnancy, rupture rudimentary horn, endometriosis, preterm labour and to improve the symptoms of dysmenorrhea and chronic pelvic pain of the patient.

In conclusion, I present this case of laparotomy resection of a rudimentary uterine horn in a patient with progressive dysmenorrhea which symptoms are progressive post right salpingoophorectomy, which leads to blocked retrograde menstruation. Care must be taken to diagnose uterine anomaly and proper management should be conducted before intervention and it should be noted that misdiagnosis can severely impact a patient's quality of life.

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