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Unicornuate Uterus with Functional Noncommunicating Rudimentary Horn - A Rare Mullerian Anomaly

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ABSTRACT

We describe here a case of a 27 year old nulligravida presented with progressively increasing dysmenorhea since menarche. She used to take analgesics in almost every menstrual cycle .The hysterosalpingography showed right unicornuate uterus with normal fallopian tube spill and her pelvic magnetic resonance imaging (MRI) was highly suspicious of right unicornuate uterus with left non-communicating rudimentary horn with haematometra. Laparoscopy confirmed the diagnosis of right unicornuate uterus with left non-communicating rudimentary horn placed extremely lateral on the lateral pelvic wall close to the pelvic vessels and the ureter. Laparotomy was done followed by resection of left noncomunicating rudimentary horn. Left ovary and fallopian tube was preserved. Post operative course was uneventful and she was discharged from the hospital on fourth post operative day. Surgery resulted in amelioration of severe dysmenorrhea and patient was asymptomatic at six months of follow up. SUMMARY We describe her a case of 27 year old nulligravid women had increasing dysmenorhea since menarche, requiring analgesics in almost every menstruation . Hysterosalpingography showed right unicornuate uterus with normal fallopian tube spill and pelvic magnetic resonance imaging (MRI) was highly suspicious of non-communicating rudimentary horn with haematometra. Laparoscopy confirmed the diagnosis of right unicornuate uterus with left non-communicating rudimentary horn. Laparotomy and resection of the rudimentary uterine horn was done with preservation of left ovary and fallopian tube. The patient was discharged on fourth post operative day without any complication.

Keywords : unicornuate uterus, rudimentary horn, congenital mullerian anomaly, haematometra.

INTRODUCTION

A unicornuate uterus is a rare type of congenital mullerian duct malformation making a prevalence of 0.3 % of the whole population (1).This mullerian defect is the result of nondevelopment of one mullerian duct or the failure of the contralateral side to migrate to its proper location.Of all mullerian anomaly ,unicornuate uterus is found in 2.5% - 13%of women (2).

It can give rise to many gynaecological & obstetrical complications throughout a women's reproductive life, that may be avoided by the removal of the rudimentary horn .Diagnosis is difficult and usually delayed. Noncommunicating functional rudimentar horn are the most clinically significant as they are likely be symptomatic. Mullerian anomalies are commonly associated with renal, spinal & cloacal anomalies.

We present here a case of unicornuate uterus with a noncommunicating functional rudimentary horn which was extremely laterally dislocated with absolutely no connection with the existing unicornuate uterus.

CASE REPORT

A 24 year old nulligravida women presented with a history of sever dysmenorrhea since menarche. The severity increased with the time and had minimal response with the analgesics .The cyclical pain caused repeated absenteeism from the work . She had menarche at the age of 13 years and her menrtrual cycle was regular. On clinical examination nothing significant was found. Patient was further investigated with ultrasound, hysterosalpingography CECT , magnetic resonance imaging (MRI). Hysterosalpingography showed right unicornuate uterus with it's normal fallopian tube spill. The MRI was highly suspicious of noncommunication rudimentary horn with haematometra. No associated renal or other anomalies were found. After proper counseling it was decided to go ahead with diagnostic laparoscopy. Diagnostic laparoscopic findings were as follows –

- Right hemiuterus with normal fallopian tube & ovary
- A separate round structure of 3-4 cmm diameter (left rudimentary horn) in close proximity to the left pelvic wall seen
- Left fallopian tube was hypoplastic with apparently normal left ovary
- there was no anatomical connection between the two mullerian ducts, rather they were wide apart
- There was no signs of endometriosis

Decision was taken to resect out the rudimentary horn. Laparoscopic approach was unsuccessful and the procedure was converted to laparotomy . left rudimentary horn was resected out leaving behind the left fallopian tube and ovary. Cut section of the resected specimen showed haematometra with preserved all three layers of uterine wall (figure 1). Histopathology confirmed the functional uterine horn without any cervical tissue.

DISCUSSION

A precise classification of the unicornuate uterus was first presented by Buttram and Gibbons in 1979.To improve on this the American Fertility Society (AFS) produced a standard classification in 1988. According to American fertility society our patient was class – 11b having excellent prognosis (> 75%) for obstetrical outcome (3).

Because of the rarity of the disease, diagnosis is difficult in these cases due to incorrect interpretation of the clinical and

investigative procedure. Patient's history is crucial to get a correct diagnosis. Our patient presented with increasing dysmenorrhea which in retrospect ,we consider to be due to stretching of the functional noncommunicating rudimentary horn with menstrual blood collection.

Case control studies have demonstrated that the rudimentary horns are mainly right –sided (2) , In contrast, our case had rudimentary horn on the left side. Usually the ipsilateral ovary has normal function, because it is not of mullerian duct origin but, it may be dislocated. In about 80- 90 % of cases there is no anatomical connection between the two horns (4), which was present in our case also. Rudimentary horn was totally isolated and was in close proximity to the lateral pelvic wall. Excision of the rudimentary horn is the usual surgical treatment. Laparoscopic excision was unsuccessful in our case due to the location of the rudimentary horn (5) and a laparotomy approach was used.

Haematometra, haematosalpinx or even endometriosis are the consequences of retrograde menstruation . The reason our patient did not develop endometriosis and only showed haematometra could be explained by the existence of a hypoplastic right tube without any ostia to the rudimentary horn .

This case is being reported of it's rarity and having two peculiar features - rudimentary horn on left side which is contrast to the usual finding and there was no attachment of the rudimentary horn to the unicornuate uterus at any place.

CONCLUSION

Uterine anomaly should be suspected in patients in reproductive age group who presents with dysmenorrhea with increasing severity starting from menarche,adenexal mass and infertility.A correct diagnosis of this malformation may be difficult when rudimentary horn is large and displaced. Early diagnosis is essential to prevent complications. Surgical removal of the rudimentary horn is the main stay of the management with basic objective of pain relief and maintainance of reproductive capacity.

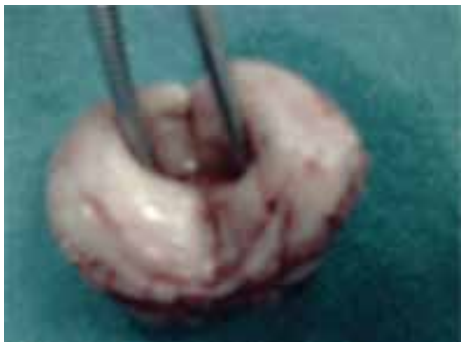

Figure 1. Cut section of resected noncomunicating rudimentary horn Showing haematometra and all three layers of uterine wall

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