wjpmr, 2022,8(7), 217-220

SJIF Impact Factor: 5.922

WORLD JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.wjpmr.com

Case Report

ISSN 2455-3301

WJPMR

HEMATOCOLPOS WITH DIDELPHIC UTERUS AND BLIND HEMIVAGINA: CASE REPORT

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Article Received on 20/05/2022 **Article Revised on 10/06/2022** **Article Accepted on 30/06/2022**

ABSTRACT

The didelphic uterus with blind hemivagina is a rare malformation, often diagnosed just after the first period. The occurrence of a hematocolpos associated with hematometry and sometimes hematosalpinx is responsible for pelvic pain and increasingly disabling dysmenorrhea. The diagnosis is made by pelvic ultrasound and, depending on the urgency, by magnetic resonance imaging; renal agenesis ipsilateral is constant in this type of malformation. The treatment consists of a wide resection of the vaginal septum thus allowing a continuous drainage of the retention hemiuterus associated with a laparoscopy showing the tubal and pelvic repercussions. We report a case of didelphys uterus with blind hemivagina diagnosed at the age of 20 and we will discuss through this case, the clinical, diagnostic and therapeutic aspects of this uterine malformation.

KEYWORDS: Uterus didelphys, blind hemivagina, hematocolpos, surgical treatment, prognosis- amenorrhea oligomenorrhea.

INTRODUCTION

The real incidence of uterine malformations is difficult to assess in the literature. Didelphic uteri with blind hemi-vagina are rare, manifesting most frequently during the first menstruation by unilateral hematocolpos with hematometry or even hematosalpinx responsible for primary dysmenorrhea and pelvic pain.[1]

The diagnosis is made by pelvic ultrasound supplemented by magnetic resonance. We report a case of didelphic uterus with blind hemivagina diagnosed at the age of 20, we will discuss through this case the clinical, diagnostic and therapeutic aspects of this uterine malformation.

PATIENT AND OBSERVATION

We report the case of a 20-year-old patient who consulted for chronic pelvic pain associated with oligomenorrhea evolving for 2 years.

The patient reported in her history, at the age of 16, a 6-month secondary amenorrhea with hematocolpos, which required surgical drainage by incision of the hymen.

The physical examination reveals a voluminous abdomino-pelvic mass, mobile, arriving above the umbilicus.

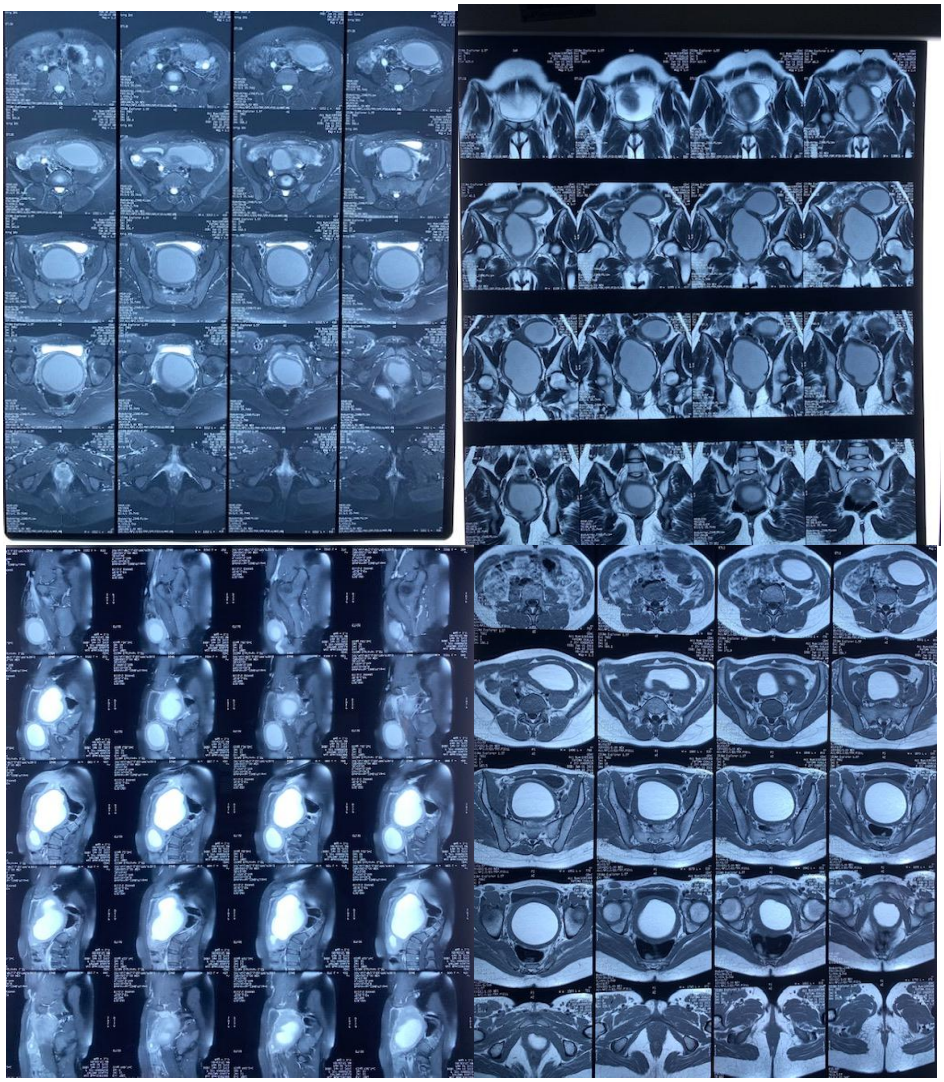
Gynecological examination finds an incised hymen, with a bulging pouch through the hymen.

On digital rectal examination, bulging and painful mass at the level of Douglas cul-de-sac.

The pelvic ultrasound shows two uterine hemimatrices, the left of which presents a hematometry communicating with a voluminous hypoechoic mass measuring 84 mm, suspecting a left hematocolpos. A left renal agenesis was also objectified.

Pelvic MRI confirmed the uterine malformation, with unilateral left hematometry on a didelphic uterus with blind hemi-vagina classified U3b C2 V2 (Figures 1 – 4)

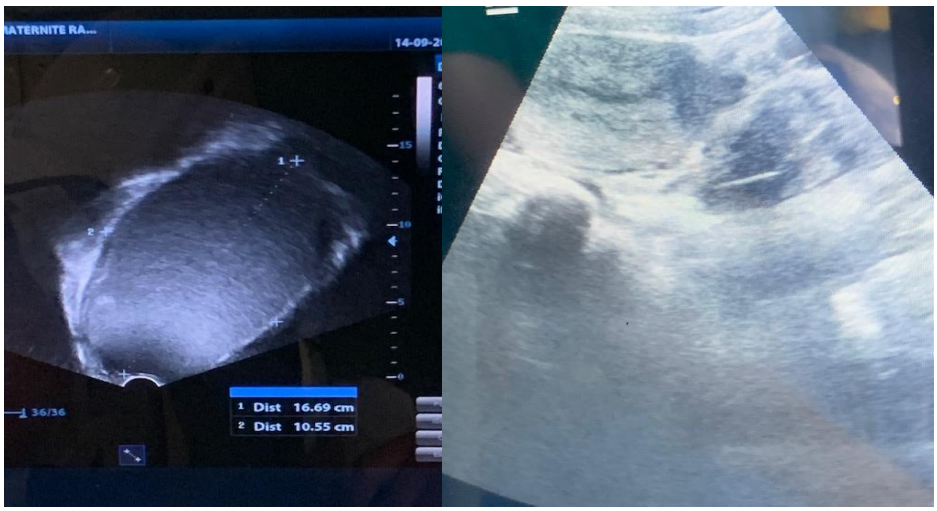
The uterus is globose, measuring 20 x 9 x 14 cm, presenting two divergent uterine cavities as well as two distinct cervical masses.



Figures 1 - 4: Pelvic MRI: didelphic uterus with blind hemi-vagina and unilateral left hematometry, classified U3b C2 V2.

The hematocolpos was drained vaginally, with evacuation of approximately 600 mL of blood.

The evolution was marked by the recurrence of 3 episodes of pelvic pain in the same year, each time requiring evacuating drains, pending possible radical surgery. (Figures 5 – 6).



Figures 5 – 6: Pelvic Ultrasound before and after evacuating the hematocolpos.

DISCUSSION

The bicornuate uterus is a uterine malformation linked to the arrest of organogenesis between 10 and 12 weeks of pregnancy, with abnormal fusion of the two Müller channels.[1]

According to Musset's classification,[2] it is important to distinguish

- Unicervical bicornuate uterus: it corresponds to two hemiuterus fused to a lower part with a single cervix and, depending on the case, a single isthmus (pseudounicorns) or two independent hemi-isthmuses. The separation begins above the theoretical mid-height of the uterine body
- Bicervical bicornuate uterus: the channels of Muller keep their duality over the entire height of the organ.
- The didelphys uterus is the variety where the two cervixes and the two vaginas are separated.

Bicervical bicornuate uteri correspond to class 3 according to the classification of the American Fertility society, and Buttram, and type 3 of the classification of Acien.

Malformations of the urinary tract appear at the same time when Wolf's and Müller's channels are topographically close; Renal agenesis, reported in several series, is almost constant.[3]

In the case of a bicervical bicornuate uterus, the lack of canalization of the vaginal bud on one side is the cause of a blind hemivagina, which, during menarche explains the development of a unilateral hematocolpos and by reflux of blood into the uterine cavity or even sometimes into the fallopian tube with hematometry and hematosalpinx, responsible for primary dysmenorrhea and pelvic pain. The gynecological examination including the digital rectal examination seeks to find the bulge of the retentional hemivagina in the genital canal.[4]

Radiological examinations provide diagnostic confirmation and look for associated complications. Pelvic ultrasound by its ease of access remains the most suitable and least invasive way to establish the diagnosis quickly by highlighting the bifidity of the device genital, she appreciates the retentional volume in the vagina, the uterus or even the fallopian tube; it is also looking for an associated ipsilateral renal agenesis.

Three-dimensional ultrasound is interesting because of the spatial representation of the anomaly with visualization of the anatomical relationships.[5] In outside of an emergency situation, magnetic resonance imaging (MRI) is the examination of choice for carrying out the differential diagnosis:

The complete septus uterus when the uterine body is unique and a septum descending to the endocervix separates two endometrial cavities.

We will evoke the diagnosis of a didelphe uterus when the two uterine bodies are distinct from each other with two endocervical channels also. The blind hemi vagina can also be suspected by MRI in addition to the clinical examination.[4,6]

If the diagnosis is evoked late, we should will look for a fistula having allowed a progressive but insufficient drainage of the retention towards the permeable side; the examination will show a purulent discharge latero-cervical. If the fistula is located at the cervical level, only hysterography allows to highlight it. Intraoperative hysteroscopy can hardly visualize the fistulous tract.[7]

Surgical treatment involves wide resection of the vaginal septum in order to ensure drainage of the hematocolpos and avoid secondary vaginal stenosis. Indeed, when the drainage is simple without resection of the vaginal flange, the evolution will be towards fibrosis and vaginal stenosis. Intraoperative ultrasound control ensures good emptying of the malformed hemiuterus.[8]

The immediate prognosis after surgical treatment is satisfactory with disappearance of pelvic pain.[10] The chances of procreation of these patients are preserved; even long-term uterine retention does not alter the endometrium or the possibility of implantation. The occurrence of miscarriages and ectopic pregnancies due to associated tubal damage is increased. During pregnancy deemed to be high risk, these patients are more exposed to the risk of preterm delivery due to reduction in the size of the uterine cavity, defective presentation and dystocia during labor causing an increase in the rate of caesarean sections.[4]

CONCLUSION

The bicervical bicornuate uterus with blind hemivagina is a rare malformation, responsible from the first menarche for pelvic pain and increasingly disabling dysmenorrhea. The combination of pelvic ultrasound and (apart from emergency) resonance imaging magnetic which remains the examination of choice confirms the diagnosis. The treatment is surgical consisting of a complete resorption of the septum vagina allowing continuous drainage of menstrual retention and avoiding fibrosis and vaginal stenosis post-operatively. The odds of procreation are preserved, with however an increased risk of miscarriages and ectopic pregnancies. During pregnancy, the risk of prematurity and dystocic presentations remains increased.

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