
Case report

Praevia Barrier due to the Non Gravid Horn of a Bicornis Unicollis Uterus: Case Report

Obstacle Prævia Due à la Corne non Gravide d'un Utérus Bicorne : à Propos d'un Cas

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ABSTRACT

Uterine malformations are present in 1-4% of women. There are various forms, varying from minor malformations like uterus arcuatus to major ones like uterus didelphys. Although some of these malformations can be asymptomatic, obstetric complications are numerous. These include spontaneous abortion, preterm labor, fetal malpresentation, premature rupture of membranes, stationary labor, uterine rupture, or even praevia obstacle. We hereby report on a case of cesarean section indicated for praevia barrier due to the non gravid horn of a uterus bicornis unicollis.

KEY WORDS: Uterus bicornis unicollis; Pregnancy; Praevia obstacle by the non gravid horn; Cesarean section.

RÉSUMÉ

Les malformations utérines, rencontrées chez 1-4% des femmes, se présentent sous diverses formes allant des formes mineures comme l'utérus arqué aux formes majeures comme l'utérus didelphe. Bien que certaines de ces malformations soient asymptomatiques, les complications obstétricales liées à ces anomalies sont nombreuses. Elles incluent l'avortement spontané, le travail prématuré, les mal présentations, la rupture prématurée de membranes, le travail stationnaire, la rupture utérine, voire un obstacle prævica. Nous rapportons ici un cas de césarienne en urgence indiquée pour obstacle prævica due à la corne non gravide d'un utérus bicorne.

Mots clés: Utérus bicorne, Grossesse, Obstacle prævica due à la corne non gravide; Césarienne d'urgence.

INTRODUCTION

Embryologically, the uterus results from the fusion of the mullerian ducts and its subsequent development (1). Uterine malformations are rare, their incidence being between 1 and 4% (2,3). These malformations result either from the absence of fusion of mullerian ducts, from partial fusion, or from failure of development of fused mullerian ducts. They can also result from failure of resorption of uterine septum (4). Absence of fusion or partial fusion may be asymptomatic until patient desires childbirth if there is development of the mullerian duct(s) as seen in uterus bicornis (2,5). During labor, the non gravid horn of the uterus may act itself like a praevia barrier. We hereby report on a case of

uterus bicornis unicollis discovered during cesarean section indicated for praevia obstacle.

CASE REPORT

It is the case of Mrs. N.A.C., 21 years old, G1P0, single, admitted on the 31 January, 2012 for premature rupture of membranes at 39 weeks gestation, with no other complaint. The current pregnancy was followed in a district hospital where ultrasound scan revealed no anomaly. She had her first menses at 12 years old, her cycle lasts 30 days and her menses 7 days. She had primary dysmenorrhoea. Her first sexual intercourse was at age 20.

On admission, her general state was good and the vital parameters were normal. Obstetric

examination revealed a fetus in cephalic presentation, the symphysis-fundal height was 31 cm and the fetal heart rate was 145 beats /min. On vaginal examination, the cervix was median, hard, 40% effaced and closed. The presenting part was at -3 giving a Bishop score of 2/13. The pelvis was clinically normal. A soft mass of about 6 cm was found posterior and lateral (left) to the cervix. The diagnosis of premature rupture of membranes in a woman with unknown pelvic mass was made and antibioprophyllaxis with Ceftriaxone started (1g every 12 hours). A full blood count and coagulation profile were done and induction with misoprostol 50 µg every 4 hours was started on the 1st February 2012. After the 3rd dose of misoprostol, we had normal contractions and the cervix was 3 cm dilated. One hour later the cervix was 4 cm dilated and a partogram was opened. After 6 hours of good contractions, there was full cervical dilatation, but with a presenting part at station -2 above the pelvic mass and a small caput succedaneum. The fetal heart rate was normal. The diagnosis of stationary labor due to a praevia barrier was made and an emergency caesarean section performed through a Pfannenstiel incision on the 2nd February, 2012. We extracted a female fetus which weighed 2525 g with an Apgar score of 6 and 8 at the 1st and 5th minutes respectively. After removing the placenta and the fetal membranes, the uterus was exteriorized for better repair and hemostasis.

During examination of the uterus and adnexae, we discovered that there were only the right round ligament and the right adnexae. Pelvis exploration revealed that the praevia mass was the left (non gravid) horn of the uterus to which was attached the left adnexae and round ligament (figure). The abdominal cavity was cleaned and both halves reintegrated in the abdominal cavity. Then, the abdominal cavity was closed. Post operative recovery was good and the patient was discharged after 7 days. She was seen 12 weeks post operatory. Abdominal ultrasound scan and intravenous pyelography revealed no added malformations of the urinal tract.



FIGURE: Uterus bicornis; the 2 halves of the uterus were slightly rotated (the right anticlockwise and the left clockwise) to show the adnexae. The right horn of the uterus (the biggest) was the one containing the fetus

DISCUSSION

Uterus bicornis is a rare uterine malformation. Its real incidence is not known because it may be asymptomatic (5), but according to Braun et al, it represents 13.6% of all uterine malformations (6). Otherwise, it may be present in 0.3% of women. It results from the partial fusion of the mullerian ducts, the causes being unknown. Uterus bicornis can be unicollis as in our case (the most frequent) or bicollis (with 2 cervices). In this latter case, it can be accompanied by 2 hemi vaginas due to absence of fusion of the 2 mullerian ducts (6).

There is no symptom until puberty. At puberty and with estrogen priming on the uterus, the two horns will develop, secondary sexual characters are present and normal, there is no delay of age of menarche, but there may be primary dysmenorrhoea, as in our case. In case of uterus bicornis bicollis, there are on speculum examination 2 cervices which can be separated by a longitudinal vaginal septum giving 2 hemi vaginas.

Clinical diagnosis of uterus bicornis unicollis is difficult, most often the malformation goes unnoticed and is discovered incidentally during (three dimensional) ultrasound scan, resonance magnetic imaging, laparoscopy or during hysterosalpingography (5-7). The malformation may be discovered during laparotomy or during caesarean section, as in our case. Many complications of uterus bicornis are known. These include spontaneous abortion (26-36%), premature labor (25-47%), premature rupture of

membranes as in our case (20-28%), fetal malpresentation (28-46%), stationary labor due to cervical dystocia or to a praevia obstacle because the non gravid horn can obstruct fetal descent, uterine rupture especially if the pregnancy is located in a rudimentary horn, high cesarean section rate (61-63%), high perinatal mortality (12-37%) (3,8,9). In our case, there was absence of descent of the fetal head which was due to the non gravid horn of the uterus. That is why the presentation remained unengaged despite good contractions and small fetal weight. Nevertheless, cases of uterus bicornis with normal vaginal deliveries have been observed (3). The diagnosis may not be done during cesarean section if adnexae are not examined.

The treatment of uterus bicornis depends on the clinical presentation. If it is asymptomatic, it is advised just to observe since normal obstetric outcomes have been observed in some women (3), but if there is dysmenorrhoea due to congenital cervical stenosis, a cervical dilatation has to be done. In cases of recurrent or habitual abortions due to uterus bicornis, metroplasty has to be done (different techniques have been described (10)) and the subsequent pregnancies delivered by elective caesarean section. The prognosis is sometimes good especially if there is no obstetric complication.

CONCLUSION

Uterus bicornis is a rare uterine malformation. During labor, one half of the uterus may act itself like a praevia mass. The diagnosis can be made during laparotomy if the pelvic organs are explored. This case report reminds us that in case of antenatal diagnosis of bicornis unicollis uterus, close intrapartal monitoring must be done in order to diagnose earlier a praevia barrier and to avoid some complications that can occur such as uterine rupture.

CONFLICTS OF INTEREST

The authors have none to declare

AUTHORS' CONTRIBUTIONS

NE managed the case and wrote the article, NWD received the patient, assisted during surgery and followed her up after surgery.

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