

## Successful Term Pregnancy in a Unicornuate Uterus: A Case Report

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### Abstract

**BACKGROUND:** Congenital uterine anomalies represent a distortion of the uterine anatomy due to maldevelopment of the Mullerian duct system. They occur in 1 to 10% of the population, 2 to 8% of infertile women and 5 to 30% of those with miscarriages.

**CASE PRESENTATION:** Mrs RM was a 26 year old booked primigravida who was earlier managed as a case of primary dysmenorrhoea. A hysterosalpingography was performed when was about a year into marriage which revealed a unicornuate uterus. She conceived spontaneously and booked at about 16 weeks gestational age. She had persistent breech presentation at term and subsequently had elective Cesarean section. She was delivered of a live male baby that weighed 2.9 kilogram. There was a right unicornuate uterus with a non-communicating rudimentary horn.

Both the mother and baby did well and were discharged home. They were also seen at the post-natal clinic after five weeks in satisfactory condition.

**CONCLUSION:** Congenital uterine anomalies are relatively common but often misdiagnosed. They pose significant impact on infertility and foetal wastage. However, the index patient was incidentally diagnosed prior to pregnancy with favourable pregnancy outcome.

**Keywords:** Breech presentation, Cesarean Section, Congenital anomaly, Term Pregnancy, Unicornuate uterus.

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Date of Submission: 06-03-2018

Date of acceptance: 26-03-2018

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### I. Introduction

Congenital uterine anomalies represent a distortion of the uterine anatomy due to maldevelopment of the Mullerian duct system<sup>1</sup>. These anomalies are present in 1 to 10% of the unselected population, 2 to 8% of infertile women and 5 to 30% of women with a history of miscarriages.<sup>1</sup> The true population prevalence of congenital uterine anomalies is difficult to assess partly because there are no universally standardized classification systems and partly because the best diagnostic techniques are invasive, therefore, they are rarely applied to low-risk study populations<sup>2</sup>. Sometimes the best diagnostic tools might be unavailable and where available are not affordable.

A unicornuate uterus with a rudimentary horn is an anomaly that occurs due to defective fusion of one of the paired Mullerian ducts. The incidence of a rudimentary-horn in pregnancy is estimated to be 1: 76000- 1: 140000 pregnancies<sup>3,4</sup>.

The reproductive performance of women with unicornuate uterus is poor, with a live birth rate of 44%, and ectopic pregnancy rate of 4%.<sup>5</sup> Women with unicornuate uterus presents differently, with 24.3% first trimester abortion, 9.7% second trimester abortion and 10.5% with intrauterine foetal demise. These presentations might be due to abnormal uterine and ovarian arteries and also decreased muscle mass as well as cervical incompetence<sup>6</sup>.

The risk of uterine rupture in non-communicating rudimentary horn is between 50-90% with the majority; up-to 80% occurring by the end of the second trimester<sup>7</sup>. It is not always easy to detect unicornuate uterus prior to delivery and some cases are detected incidentally as pregnancies progresses to live births<sup>8,9</sup>.

### II. Case Report

The patient was a 26-year-old booked primigravida who was earlier managed as a case of primary dysmenorrhoea. A hysterosalpingography was performed when she was one year into marriage and that revealed a unicornuate uterus. She conceived spontaneously and booked at about 16 weeks gestational age. Her booking parameters include; height of 55 centimeter and weight of 56 kilogram. The blood pressure was

120/60mmHg and her urinalysis result was normal. The packed cell volume was 32%, hemoglobin genotype of AA and blood group O rhesus D positive. The VDRL and RVS were non reactive. An Obstetric Ultrasound revealed a single live intra-uterine fetus at 14 weeks gestational age with an expected date of delivery of 26/09/2016. The placenta was anterior- fundal and the liquor volume was adequate. She had 2 doses of Tetanus toxoid and Sulphadoxine/pyrimethamine each and was regular on her antenatal care visits and hematinics. The pregnancy remained uneventful until at about 36 weeks and 2 days gestation when ultrasound revealed breech presentation and repeated at 39 weeks and 2 days revealed persistent breech.

On examination her general condition was satisfactory. An abdominal examination revealed a dextro-rotated gravid uterus with symphysio-fundal height of 37 centimeters. It was a singleton fetus in longitudinal lie and breech presentation. It was in left saro-anterior position. The descent was 5/5 palpable per abdomen. The fetal heart rate was 142 beats per minute. Pelvic examination revealed normal vulva and vagina, the cervix was posterior, soft, one centimeter long and the cervical os was closed. The presenting part was at station 0-2.

She was counselled on the findings and the need for cesarean section and she consented to it.

A repeat packed cell volume was 37% and urinalysis was normal. Two units of whole blood were cross matched. She had a lower segment Caesarean section on 16/09/2016 and the operation findings were that of a Clean pelvis, intact gravid uterus with well formed lower segment. A right unicornuate uterus with a non communicating rudimentary horn. The liquor was clear and a live male baby in breech presentation with APGAR scores of 7 & 9 in first and fifth minutes successively and weight of 2.9 kilograms. The placenta was fundal, normal urinary bladder, fallopian tubes and ovaries. The estimated blood loss 500 millilitres. Postoperatively, she was maintained on nil per oris and intravenous fluid 5% dDextrose saline 1L 8 hourly for 24 hours. She was commenced on intravenous Ceftriaxone 1gram 12 hourly, Metronidazole 500 miligram 8 hourly and intramuscular Piroxicam 20 miligram 12 hourly for 48 hours. Oxytocin 40 International Units in 1L was infused over 4 hours. urethral catheter was also retained for 24 hours and then removed.

The antibiotics were converted to oral after 48 hours. Her post operative packed cell volume was 34%. Both the mother and baby did well and were discharged on the 6th postoperative day. They were both seen at the post-natal clinic after five weeks in satisfactory condition.

### III. Discussion

A unicornuate uterus with a rudimentary horn is an anomaly which occurs due to defective fusion of one of the paired Mullerian ducts<sup>(1)</sup>. That was what the index patient presented with. The reproductive performance of women with malformed uterus is poor, with a live birth rate of 44%, and ectopic pregnancy rate of 4%. Women with unicornuate uterus presents differently, with 24.3% first trimester abortion, 9.7% second trimester abortion and 10.5% with intrauterine foetal demise<sup>(4)</sup>. The case presented had a period of sub-fertility, however, she eventually had a term pregnancy. The risk of uterine rupture in non-communicating rudimentary horn is between 50-90% with the majority up-to 80% occurring by the end of the second trimester<sup>(6,7)</sup>. Mrs. RM had persistent breech presentation at term with elective Caesarean section with a live baby with no accompanying complication. It is not always easy to detect unicornuate uterus prior to delivery and some cases are detected incidentally as pregnancies progress to live births<sup>(9)</sup> Just as in the index patient who was incidentally detected at infertility work-up.

### IV. Conclusion

Congenital uterine anomalies are relatively common but often misdiagnosed. They pose significant impact on fertility and pregnancy outcome. However, the index patient was incidentally diagnosed prior to pregnancy with favourable outcome.

### References

- [1] H1. Meryem, K. Mehmet , G. A. Ahmet. Case of Unicornuate Uterus Accidentally Discovered During Patient's Fourth Delivery : *Eur J Basic Med Sci* . 2015;5(4): 67-69
- [2] C. Donatella, M. Maddalena, M. Cristina , B. Paola, M. Massimo. Pregnancy in a unicornuate uterus: a case report: *J Med Case Rep*. 2014; 8: 130.
- [3] JC. Chang, YC. Lin. Rupture of rudimentary horn pregnancy. *Acts Obstet Gynaecol Scand* 1992;71:235-238
- [4] Y. Jaysigbe, A. Rane, H. Stalewski, S. Grover. The presentation and early diagnosis of the rudimentary horn. *Obstet Gynaecol* 2005; 105: 1456-67.
- [5] ME. Akar, D. Beyer, S. Yidiz, M. Oze, ZR. Yilmaz. Reproductive outcomes of women with unicornuate uterus. *Aust N.Z Obstet Gynaecol* 2005; 45(2):148-150.
- [6] D. Reichman, MR. Lanfer, BK. Robinson. Pregnancy Outcome in unicornuate uterus: A review . *Fertil Steril* 2009; 91(5): 1886-1894
- [7] GF. Grimbizis, R. Campo, S. Gordts, S. Brucker, M. Geogoleet, V Tanos, et al. On behalf of the Scientific Committee of the Congenital Uterine Malformations (CONUTA) common ESHRE/ESGE working Group. Clinical approach classification of Congenital Uterine Malformations: *Gynaecol Surg*. 2012; 9:119-129 d
- [8] NJ. Khati, AA. Freizer, KA. Brindle. The Unicornuate Uterus and its variants. Clinical Presentation, imaging findings and associated complications. *J Ultrasound Med*. 2012; 31:319-331.

- [9] S. Jin Woo, K. Hai Joon. Case of livebirth in a non-communicating rudimentary horn pregnancy: *J Obstet Gynaecol Res* 2005; 31:329-331.



Image 1 & 2: Hysterosalpingography showing single Fallopian tube

Image 3 & 4: The Uterus at Cesarean Section with a rudimentary horn on the left





Umar A G. " Successful Term Pregnancy In A Uniconuate Uterus: A Case Report ." IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), vol. 17, no. 3, 2018, pp 69-72