

## Pregnancy in the Unicornuate Uterus

(A REPORT OF TWO CASES)

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The incidence of all uterine abnormalities, with the exception of infantile and hypoplastic types has been given as one in 420 in a series of 13,000 reported by A. A. Gemmel (1952). Munro-Kerr (1937) stated that pregnancy is rare in the unicornuate uterus. W. Hunter has given an admirable classification of developmental anomalies of the uterus in the *Journal of Obstetrics and Gynaecology of the British Empire*, 1950, and the following cases appear to be both of type 17 — uterus unicornis unicorpus unicollis.

### CASE I:

A healthy African woman of about 25 years of age was admitted to hospital in labour on 8th August, 1962. She gave a history of having been in labour for 18 hours, that the waters had broken about twelve hours previously, but that labour had not progressed as quickly as she had expected. Labour pains had been strong since the waters broke. She had had one previous normal delivery of a normal female child in 1960. She had remained well during her present pregnancy but had not attended an ante-natal clinic. There was no history of gynaecological disturbance and she had had no miscarriages and no operations.

On examination she was a healthy adult of about 25 years, in strong labour, pains occurring every three minutes. There was no clinical anaemia, her blood pressure was 110/60 between pains. The urine was normal with no albuminuria. By palpation the uterus was at term, the foetus being in the position of a transverse lie in a dorso-posterior position, the head lying in the R.I.F. The shoulder was not engaged. The pelvis appeared adequate and P.V. the vagina was found to be greatly elongated and the cervix was not palpable at all. The foetal heart was irregular, rate about 160/minute and there was slight meconium staining of the draining liquor.

In view of the mother's excellent condition and the signs of foetal distress, an emergency caesarian section was decided upon. On opening the abdomen, the lower segment of the uterus was found to be crossed by an enormous leash of distended vessels running obliquely across that viscus in a direction from the right anterior superior iliac spine towards the lateral edge of the left costal margin. Palpation and inspection revealed that the whole uterus had undergone rotation through 180° and that the large vessels overlying the "lower segment" were in fact the right uterine artery and veins. The uterus was rather more blue in colour than normal although there was no sign of anoxia in the abdominal incision. The uterus was untwisted slowly and it was noticed that torsion had occurred in the upper vagina just below the cervix. No damage to the vagina was apparent. On correction of the position, the uterus rapidly returned to normal colour, and the distension of the uterine veins was reduced. The foetal position was R.O.A. Section was proceeded with due to the foetal distress which had been present before operation, although it is possible that this would have been relieved by correcting the position of the uterus. There were no blood vessels on the left side of the uterus. A normal female child was delivered, with signs of blue asphyxia but rapidly improved on resuscitation. The placenta was found to be implanted high on the posterior wall of the uterus. The uterus was closed and haemostasis secured and the abdominal cavity examined for traces of the left genital tract. No ovary, tube, broad ligament, round ligament or uterine vessels could be found on the left side. The vagina was elongated and the cervix unusually mobile, particularly on the left side. Both kidneys and ureters were normal in position and size and no trace of vestigial structures was found on the left side. All other abdominal organs appeared to be

normal. Blood loss at operation was small and her post-operative progress was good, involution proceeding at a normal rate. The infant on examination showed no congenital defect and made good progress while in hospital.

#### CASE II:

An African woman of about 30 years of age was admitted at term and in labour on 17th October, 1963.

She gave a history of a previous caesarian section for a prolonged labour with her first child. This was her second pregnancy and she denied previous gynaecological trouble. She had had no miscarriages and no other operations apart from the previous caesarian section.

The operation had been carried out in another country and no details were available, nor could any be obtained later on the findings. She had attended an anti-natal clinic once during the present pregnancy about seven weeks before admission. At that time the foetal position was given as R.O.A. and the uterus estimated to be at 32 weeks. She said she had been in labour twelve hours.

On examination she was a healthy woman of about thirty years of age. There was no clinical anaemia, the urine was clear and contained no albumin. Blood pressure was 130/80 and she was in strong labour, having pains every five minutes. There was a well healed midline subumbilical surgical scar which showed no signs of keloid formation. By palpation the uterus appeared to be at term and the foetal lie transversely oblique with the foetal head in the L.I.F. On vaginal examination the cervix was high but palpable, deviated to the left, softened at its edges, but with a dense hard ring palpable about the level of the internal os which would not admit the tip of a finger. The foetal heart was irregular but strong and in view of the previous section and the fibrous ring at the cervix it was decided to repeat the section.

At operation the uterus appeared twisted so that the greater part of the lower segment, which showed a well healed scar of a previous section, was lying in the L.I.F. and the fundus was under the right costal margin. Further examination at this stage showed no left uterine vessels. Section was completed and a living male infant delivered. The child cried strongly and immediately. The placenta was implanted in a high right anterior position. Examination inside the lower segment revealed a firm fibrous ring at the level of the internal os about  $\frac{1}{2}$ " in diameter. Further

examination of the abdomen was carried out after closure of the uterus and no trace of left uterine vessels was found. The uterus appeared to be unicornis, unicorpus, unicolis, with normal tube, ovary, broad and round ligaments on the right side only. The vagina was elongated and the cervix very mobile. There was a small fold of peritoneum at the left internal inguinal ring containing a small fibrous cord 2 mm. diameter and about 5 cm. long. The cord tapered off in the fold disappearing into the substance of the peritoneum in a downward and backward direction towards the pelvis. A recognisable left ovary was found at the medial side of the lower pole of the left kidney in a fold of peritoneum extending from the left kidney downwards. The fold contained small vessels running from the left renal vessels and below the ovary was a short tube with a well developed fimbrial end. The tube was about 4 cm. long and rapidly narrowed to petre out into the parietal peritoneum. The kidneys and ureters appeared normal and no abnormality of any other abdominal organ was found. No biopsy was taken of the vestigial structures found. Operative blood loss was normal. Postoperative progress was good and uterine involution progressed normally. The infant showed no congenital abnormality and made good progress.

Only a few cases of this nature have been described in the literature and the fact that Case I had had a previous normal delivery suggests that some cases in which this condition is present will not come to the notice of the clinician.

In Case II the existence of a firm fibrous ring at the level of the internal os was probably the cause of a failure to progress during her first labour which was terminated by a caesarian section. It is possible that if this obstruction to

normal labour had not been present, both of her deliveries might have been normal and the condition of the uterus missed.

These two cases were both discovered at operation in a series of some three hundred caesarian sections carried out at Lusaka Central Hospital over a period of 3½ years. About four thousand deliveries were conducted in the hospital during the same period but it must be born in mind that a large number of African women prefer to deliver at home and only seek admission if complications ensue. They are also frequently reluctant to take advantage of antenatal services.

Malpresentation due to displacement of the whole uterus and contents rather than malposition of the foetus in the uterus was a marked feature in both these cases. It would appear that the absence of controlling ligaments on one side of the uterus combined with overstretching of those on the "normal" side results in unusual mobility of the uterus in later pregnancy and this may be noticed by a sudden change in apparent presentation after thirty-two weeks.

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