

OBSTRUCTED LABOUR DUE TO UTERUS-DIDELPHYS

(A Case Report)

by

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Uterus didelphys is not rare in the literature. The first mentioned abnormality of this type in a living adult was in 1873, when Frankel cited a case. It was not until the late nineties that the importance and frequency of this condition was recognised as a clinical entity.

The term didelphys is derived from the two Greek words meaning double uterus. Each uterus has only one set of ligaments and appendages arising from its lateral border (Miller, 1922).

Referring to the frequency of uterus didelphys, Stolper found ten in 7,400 married women (Findley, 1926).

The clinical significance of this abnormality is only realised in the event of pregnancy and labour. There is a high incidence of abortions, premature deliveries and accidents of labour associated with this abnormality. Diagnostic difficulties arise when a primipara appears late in pregnancy or after the onset of true labour. It is interesting to note that the non-gravid uterus behaves as an appendix and as the pregnancy advances it is commonly dragged be-

hind the pregnant uterus and may cause obstructed labour.

The case presented here had exceptional features which are interesting and confusing.

Case Report

Mrs. G., Hindu, aged 28 years, primigravida, with 8½ months' amenorrhoea, was admitted in the septic labour room of the Zenana Hospital, Jaipur, on 1st September, 1963, at 6.00 P.M. for labour pains since 12 hours, after being handled by a "dai" in the village.

Personal history: She was married in childhood; menarche occurred at the age of 15 years. Menstrual history was normal except for dysmenorrhoea. There was no history of dyspareunia.

General examination: She was fairly well built and well nourished; height 5 ft. 2 inches, with normal female configuration. She looked anxious and exhausted. Pulse — 88/minute; temperature — 98.2°F.; blood pressure — 130/80 mm of Hg; respiration — 20 per minute.

Systemic examination: No abnormality detected.

Obstetric examination: Per abdomen, the uterus appeared elongated and was deviated to the right side. Height of uterus corresponded to that of 36 weeks' size. Presentation—vertex in right occipito-transverse position, and high floating head. Foetal heart sounds 150 per minute, regular and with good tone.

Vaginal examination by registrar on duty: Cervix pushed behind the symphysis pubis, not taken up. Os one finger tight; membranes present; vertex presenting at the brim. Exact position of the head could not be made out. Sacral promontary not reach-

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ed, ischial spines slightly prominent; sacro-sciatic notches normal; outlet had average diameters. Posterior vaginal wall was bulging abnormally giving the impression of a loaded rectum.

Progress: Patient was given an intravenous glucose drip, prophylactic antibiotics and sedatives. She slept intermittently during the night; the uterus was acting moderately but the head remained high floating, with foetal heart sounds ranging from 140 to 146 per minute.

Vaginal Examination at 6.10 A.M. on 2-9-1963: Introitus was tight; cervix-pushed anteriorly behind the symphysis pubis, not taken up; os 1/5th dilated; thin membranes felt over the head, which was high up and could not be pushed into the cavity. A soft cystic mass, slightly mobile from side to side, was felt occupying the hollow of the sacrum. Pelvis was adequate. The soft mass was thought to be an ovarian cyst obstructing labour, so a caesarean section was decided upon.

The abdominal cavity was opened by a midline sub-umbilical incision, the bladder was pushed up midway between the umbilicus and the symphysis pubis. A lower segment caesarean section was done and a living female baby, weighing 5 lbs. was delivered. Absence of the round ligament and appendages on the left side of the uterus was noticed. On exploring the pelvic cavity, it was found that the pregnancy was in the right uterine horn. The left horn with its appendages was lying in the hollow of the sacrum, enlarged to the size of 14 to 16 weeks' pregnant uterus. A peritoneal fold was seen to extend directly from the bladder anteriorly to the rectum posteriorly. While swabbing the vagina after section it was noticed that there were two separate vaginae. The right one was well developed, the left one being very narrow, and the septum not extending down to the introitus.

Twelve hours after the operation the patient passed a decidual cast from the non-gravid horn, measuring 4" x 3", triangular in shape.

The patient made an uneventful recovery except for low grade fever, ranging from 100°F. to 101°F., and slight distension of the abdomen during the first forty-eight hours of the post-operative period.

Excretory pyelography 6 weeks later showed no abnormality of Wolffian ducts.

Discussion

Uterus didelphys is due to the failure of the fusion of two Müllerian ducts. There is an unobstructed passage through the vagina, cervix, non-gravid body and on to the fallopian tube, together with a genetic reaction within the uterus as evidenced by the development of the decidua.

In cases of uterus didelphys menstrual irregularities are not uncommon and patients usually complain of dyspareunia. This abnormality is commonly discovered by a history of menstrual disorder, dyspareunia, or repeated abortions; but in the present case there was only a history of prolonged infertility.

The behavior of the pregnant horn is of paramount interest in respect to the management of these cases. Uterine inertia is a common occurrence during labour. The cause may be the mechanical disarrangement of the muscle fibres resulting in uterine dysfunction. The expulsive forces may be insufficient to effect delivery. More often the chief difficulty occurs due to interference in the mechanism of cervical dilatation (Schauffler, 1941).

The contour of the gravid uterus in our case though elongated was not altered. Any notable irregularity of the vaginal wall should suggest the possibility of developmental error. In the present case the septum was not reaching up to the introitus and later on it was found that it was thin and closely approximating the left vaginal wall so as to occlude the canal. This

was probably caused by the backward displaced non-gravid uterus pulling up the cervix with attached vagina and thus narrowing the vaginal canal. Approach to the cervix of the non-gravid uterus was not possible and therefore the correct diagnosis was missed.

Complications associated with this abnormality:

Uterine inertia, occasionally serious, is described as a common occurrence during labour. The cause may be the mechanical disarrangement of muscle fibres resulting in uterine dysfunction. The expulsive forces may be insufficient to effect delivery. More often the chief difficulty occurs due to interference in the mechanism of cervical dilatation (Schauffler, 1941).

Frequently, the duplexity of uterus gives rise to fundic irregularities—malposition of the foetus and/or non-engagement of the head due to non-descent of the presenting part because the non-gravid horn swings into the hollow of the sacrum and obstructs the passage. In the present case the head remained high in spite of the patient being in labour for more than twenty-four hours and there was no pelvic contraction. Uterine rupture occasionally is a serious complication which occurs during labour and has been reported in the literature. This is due to mechanical obstruction caused by the impacted non-gravid horn which enlarges to two or three times its normal size. In the present case the non-gravid horn was enlarged to the size of a sixteen weeks' pregnant uterus. If this case had not been carefully assessed at the second

examination the uterus might have ruptured. In 5.9% of all deliveries occurring in women with this malformation, labours were obstructed by the other uterine horn (Miller, 1922).

In the literature 41.9% of all pregnancies occurring in women with this malformation had normal confinement (Miller, 1922).

Hence, the case has to be judged according to the character of uterine action, descent of the presenting part, dilatation of the cervix and progress of labour. During labour, the possibility of uterine rupture should be constantly borne in mind. The patient must be hospitalized at once when the contractions begin. In the event of delayed labour due to the impacted non-gravid horn which can not be dislodged—a caesarean section is indicated. In the present case as the diagnosis was pregnancy with ovarian cyst, no attempt was made to dislodge the cystic swelling impacted in the hollow of the sacrum and caesarean section was done.

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