

# TORSION OF GRAVID HORN IN UTERUS DIDELPHYS

## Case Report

by

V. D. SHASTRAKAR, M.B.B.S., M.O.

and

P. K. DEVI, M.S., F.R.C.S.

*Department of Midwifery & Gynaecology, Medical College, Nagpur.*

Congenital anomalies of the female genital tract have always been the subject of great interest among obstetricians and gynaecologists. Besides being anatomical curiosities, they present unusual and difficult obstetric problem when associated with pregnancy.

Double uterus was first described by an Italian, Francesco Antonio Catti in 1557, and Mauriceau reported the earliest case of pregnancy occurring in a double uterus in 1675. Kussmaul (1859) published a paper on this condition. Miller (1922) reported 35 cases of pregnancy occurring in congenitally malformed uteri. Way (1945) reported 10 cases and Hunter (1950) published a paper on double uterus. Fenton and Singh (1952) reported 146 pregnancies in 62 patients with congenital anomalies of uterus. Baker et al (1953) reported 108 cases from the literature and 9 of their own. Holmes (1956) reported 9 cases and discussed the complications of pregnancy and labour occurring in them.

All the above writers do not mention torsion of the gravid horn of a uterus as a complication in these cases. Torsion of the gravid uterus is a rare complication of human pre-

gnancy; and torsion of sufficient degree to produce acute abdominal calamity, by arresting the uterine circulation, is one of the rarest accidents of human gestation. It is common in animals. Robinson and DuVall made a study of this complication and could find in the literature 25 such cases. Moreover, in the opinion of these authors certain of the reported cases were not true examples of this disorder. They recorded a case which occurred in uterus bicornis unicollis. Eastman (1934) recorded a case of torsion of the gravid uterus occurring in a woman with bicornuate uterus. Corr (1943) reported a case in which the condition occurred in both first and second pregnancy. Caesarean section was performed on both the occasions, and there was a soft fibroid in the left wall of the uterus. Macleod (1945) reported a case caused by an ovarian cyst in the pelvis where ovariectomy and hysterotomy were performed as the uterus appeared normal in colour.

In normal uterus the round and broad ligaments being attached to both sides of the uterus prevent excessive torsion and rotation. Bicornuate uterus predisposes to this com-

plication as supporting structures are absent on one side and as such the pregnant horn of such a uterus is excessively mobile. Moreover, the unilateral uteri are longer and narrower than normal with peritoneal and muscular attachments which are usually defective and these increase their tendency to torsion. Presence of fibromyoma predisposes to this condition. In early months it simulates ectopic gestation and in later months abruptio placentae.

The case reported here occurred in double uterus and, because of the rarity of the condition and unusual symptoms presented, it is reported.

#### Case Report

Mrs. A., aged 18 years, Hindu female, a primigravida, first attended the outpatient department of the Medical College Hospital, Nagpur, on 2-7-56. She was eight months pregnant and came to book herself for confinement.

Past medical history revealed nothing of significance.

**Menstrual History.** Menarche at 13 years 3-4/30 regular and painless, amenorrhoea of 8 months. Married 2 years ago.

**Examination Findings.** Woman of average build. Not anaemic. Cardiovascular, respiratory and alimentary systems normal. The uterus was enlarged to 34 weeks. The presentation and position were diagnosed to be breech L.S.A., extended. Foetal heart sounds were present. B.P. 110/80. Urine, no albumin or sugar. Hb 10.8 gms. %. On 6-7-56, the patient was admitted for external version. X-ray confirmed the diagnosis of extended breech. On vaginal examination nothing abnormal was noted and the pelvis was considered to be gynaecoid.

10-7-56. External version was attempted without anaesthesia but failed. The patient was kept under observation till 12-7-56 and then discharged, with advice to attend the antenatal clinic. The foetal heart sounds were present and the patient had no complaints at the time of discharge.

12-7-56. The patient was readmitted on the same evening as an emergency with a history of severe pain in the abdomen and vomiting. She had left the hospital at about one o'clock and walked home, a distance of nearly three miles and after taking her lunch she was resting when pain in the abdomen started at about 4 P.M.

**On Examination.** The B. P. was 120/80, pulse was 88/min., urine showed no albumin. Uterus was felt slightly tense, mild contractions were present. Breech LSA floating, but no foetal heart sounds were present. Slight tenderness was present in the lower abdomen. No vaginal bleeding. She was given 3 grs. of sodium amytal and kept under observation.

As the patient was restless 100 mgms. of pethidine were given after about 3½ hours. She slept well at night but next morning again complained of abdominal pain. Vaginal examination revealed uneffaced closed cervix with the foetal parts at the brim of the pelvis. During the day it was observed that the pulse rate was gradually increasing and the blood pressure rose to 140/90. She slept fairly well throughout the second night with sedatives. No clear cut diagnosis was possible and it was put down as a case of concealed accidental haemorrhage because of the pain & tenderness, the tense uterus and the slightly raised blood pressure.

14-7-56. Thirty-six hours after admission the patient was again examined. The uterus was very tense, 36 weeks' size and foetal parts could not be palpated easily. No foetal heart sounds were present and there was no vaginal bleeding. The pulse was 128/min, the B.P. 140/90. On vaginal examination the cervix was noticed to be drawn up behind the symphysis pubis and not effaced or dilated, and a soft mass was noticed in the posterior fornix. The patient was complaining of severe backache as well as continuous dull pain in the abdomen. The following conditions were thought of in the differential diagnosis: (a) Concealed accidental haemorrhage. (b) Sacculation of the uterus. (c) Extra-uterine pregnancy. (d) Hypertonic type of uterine inertia; but the signs and symptoms did not fit in with any of them. Laparotomy was done about 40 hrs. after admission. It was then found

that it was a pregnancy of about 36 weeks in the left horn of a uterus didelphys, the gravid horn had undergone torsion of one and a half turns, the uterus appearing bluish and congested. The left tube and ovary had become gangrenous and there was thrombosis of the left ovarian vein. The right horn was enlarged to about 10 weeks and a fold of peritoneum could be seen passing from the bladder to the rectum in the sulcus between the two horns. The left horn of the uterus along with the left tube and ovary was excised in view of its doubtful appearance. A small incision into the right horn revealed that it contained only decidua. The patient was resuscitated with blood and intravenous fluids. The post-operative period was uneventful. Vaginal examination revealed that there was a thin vaginal septum in close contact with the right vaginal wall with a small slit like canal and normal looking cervix projecting into either compartment. The lower end of the septum did not reach up to the introitus but was about  $\frac{3}{4}$  inch above it so that, on inspection of the perineum, only one vaginal orifice could be made out. The specimen fixed in formalin and then opened, consisted of a distended sac containing a normally developed male foetus weighing 5 lbs. 2 ozs.

#### Discussion

Torsion of a gravid uterus is a rare complication and this case presented many interesting features.

It was thought to be a case of concealed accidental haemorrhage because of the constant pain in abdomen, the rising pulse rate and blood pressure and the marked pallor which she showed after observation for 24 hours. Foetal parts were not easily palpable, uterus was tense and tender but the size of the uterus did not increase and there was no albumin in urine. She did not show the typical shock and collapse of concealed accidental haemorrhage. The pain was more in the lower uterine

segment which is not consistent with accidental haemorrhage. But cases of torsion of uterus are usually mistaken for abruptio placentae in later months of pregnancy (Eastman (1952)).

As there was predominant backache and pain in lower abdomen without any effect on the cervix, it was thought to be a case of hypertonic lower uterine segment. The high presenting part and thick cervix suggested it.

Sacculation of uterus was also thought of as the cervix was pushed high up and a soft bulging felt in pouch of Douglas which was thought to be the bulging posterior wall of uterus, but no history of disturbances of micturition was given early in pregnancy. Drawing up of the cervix can be explained by the increasing tension of the uterus.

Vaginal septum was entirely missed here at the first examination as it was soft and very thin because of stretching, each time vaginal examination being carried on through one compartment missing the other one. If this had been detected early the diagnosis of pregnancy occurring in the congenital anomaly of uterus would have been quite evident. This calamity could have been prevented by not attempting an external version. It is possible that in this case external version started off the torsion of uterus and when it became complete with the cutting of the blood supply the patient came with severe pain in abdomen and vomiting; thus explaining the symptom-free period of 48 hours after the attempt at external version.

There were no menstrual disorders in this case and she became preg-

nant within 2 years of marriage, which shows that this anomaly did not interfere with fertility. Congenital anomalies of uterus are often associated with congenital anomalies of urinary tract because of their close association during development but here no such abnormality was found. This patient had no other obvious congenital abnormalities.

*Follow-up of the Case.* The case was regularly followed up. Her menstrual cycle was regular. The vaginal septum was excised in March 1958 and tubal insufflation was done. Tube was found to be patent. Within three months of this, patient conceived and was quite normal throughout pregnancy. On 15-3-59 she was delivered by lower segment caesarean section after 36 hours of labour for hypotonic type of uterine inertia. There was a weak portion on the left side of uterus which was stitched in layers. Post-operative period was uneventful and mother and baby were discharged in good condition eighteen days after the operation.

#### *Summary and Conclusions*

A case of torsion of gravid horn of uterus didelphys is presented. Clinically, it showed the features of concealed accidental haemorrhage and diagnosis was made after laparotomy.

Congenital abnormalities of the uterus with pregnancy are met with rarely but are likely to be missed even by experienced obstetricians unless they are kept in mind while

examining patients presenting with bizarre signs and symptoms.

#### *Acknowledgments*

Our thanks are due to the Dean, Medical College and Hospital, Nagpur, for allowing us to publish this case.

#### *References*

1. Baker et al: Am. Jour. Obst. Gyn.; 66, 580, 1953.
2. Eastman: Williams Obstetrics. Ed. by: Nicholson J. Eastman, 11th edition, 648, 1955.
3. Fenton A. N. and Singh B. P.: Am. Jour. Obst. Gyn.; 63, 744, 1952.
4. Francesco Antonio Catti: 1557 quoted by Ref. No. 6.
5. Holmes J. A.: B.M.J., I, 1144, 1956.
6. Hunter W.: Brit. Jour. Obst. Gyn.; 57, 721, 1950.
7. Kusmall: 1859, quoted by Ref. No. 5.
8. Mac-Leod: 1945, quoted by Munro Kerr.
9. Mauriceau: 1675, quoted by Ref. No. 5.
10. Miller: 1922, quoted by Ref. No. 5.
11. Munro Kerr: Operative Obstetrics. 6th edition, by Chassar Moir, 462, 1956.
12. Nesbitt R. E. L. and George Corner J. R.: Obst. Gyn. Survey; 11, 311, 1956.
13. Robinson and Duvall: Quoted by Ref. No. 2, 648.
14. Smith: 1931, quoted by Ref. No. 5.
15. Way S.: Brit. Jour. Obst. Gyn.; 52, 325, 1945.