PROLAPSE OF UMBILICAL CORD OF THE 2ND TWIN WITH INTACT BAG OF WATERS OF 1ST TWIN

(A Case Report)

by

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Incidence of prolapse of cord in single pregnancies varies from 0.3 to 0.5%. The commonest cause of cord prolapse is any condition which causes inadequate filling of the lower segment. These factors are well known. It is said that about 10% of cases of cord prolapse are associated with twin labour. The present case is of unusual occurrence with prolapse of umbilical cord of the second twin with intact bag of waters of the first twin which presented by vertex.

Case Report

Mrs. R. M., aged 35 years was admitted on 24-3-1965, at 9-30 a.m. with history of labour pains, 8 hours prior to admission. She had slightly excessive show at home before admission and complained of leaking of liquor soon after admission. She was 10th gravida out of which two were twin deliveries; the babies of both twin deliveries died within a couple of days. There was no history of interference during those twin labours. Remaining 7 were full-term normal deliveries, out of which 3 were alive and 4 dead. Last delivery was 4 years ago, which was one of the above mentioned twin deliveries. Previous menstrual cycles were regular and did not reveal any significant abnormality.

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On general examination: Patient well built and nourished. Tongue and conjunctivae were pink, no oedema over feet, pulse was 80/min., B.P. was 120/70 mm. of mercury.

On local examination: Size of abdomen appeared more than the period of amenorrhoea. Foetal parts were felt with difficulty, presentation was left occipito-anterior, presenting part was floating and F.H.S. could not be located. At the level of umbilicus circumference of the abdomen was 95 cm. Fundal height was 32 cms.

Systematic examination: did not reveal any abnormality.

Investigations: Hb. 9 gms%. Urine-clear

Vaginal examination — at 11 a.m. two hours after admission, showed, fully dilated cervix with bag of waters intact, presenting part vertex, at the level of the brim and floating. Bony pelvis was within normal limits, clinically. There was no bleeding on examining finger nor excessive watery discharge noted.

During period of obervation, patient got infrequent uterine contractions. Five hours after the vaginal examination patient started leaking of liquor amnii. In view of her previous history of multiple pregnancies and present findings, it was thought that she may have multiple pregnancy or hydramnios. Seven hours after vaginal examination it was noticed that the umbilical cord had prolapsed at the vulva and it had pulsations about 100 min. Vaginal examination at the same time revealed interesting findings. The prolapsed cord was posterior and nearer to the right sacroiliac joint, cervix fully dilated as noted before and it also had same bag of waters which was present at the first vaginal exami-

nation at 11.00 a.m. Bag of waters did not reveal any cord presentation. The presenting vertex in bag of waters also appeared smaller than normal. The diagnosis of multiple pregnancy was therefore confirmed.

Treatment

Patient was put immediately in head low position and, without anaesthesia, loop of cord was pushed as high as possible above the bag of waters. Then patient was put in lithotomy position. The bag of waters was artificially ruptured; there was no descent of the cord. Immediately blades of long forceps were introduced and the first baby was delivered. Baby cried immediately. Abdominal examination revealed uterus still above the umbilicus and second foetus was oblique. Vaginal examination soon after delivery of the first baby showed absence of bag of waters and all the replaced loops of cord once again descended into the vagina. As the breech could be palpated in the left anterior quadrant and leg could be easily grasped, it was brought down. The delivery of the second twin was completed by performing complete breech extraction. Second baby also cried immediately. Both babies were male. Both weighed 1760 gms. Placenta was binovular and weighed 700 gms. The length of the cord of first baby was 37 cms. and second baby was 47 cms.

Patient underwent abdominal sterilisation 4 days after delivery, by modified Pomeroy's method. The puerperium was uneventful. Both babies showed jaundice on the 4th day which disappeared on the 7th day. Mother was discharged on the 12th day with both babies in healthy state.

Discussion

Multiple pregnancy runs a greater risk of prolapse of umbilical cord. Sir Eardley Holland estimates that 10% of cases of cord prolapse are associated with twin labour. The risk is equal for both the foetuses. The prognosis in cord prolapse of the second twin is stated to be better than for the first one. However, the present case is an exceptional one to this general statement. The case under discussion had prolapse of umbilical cord of the second twin with presence of bag of waters of the first twin. The time required for delivery of the first twin will be the deciding factor in considering the survival chances of the second twin with a cord prolapse. Thus, the duration of labour of the first twin is directly related to compression of cord of the second twin in that period. In a case of cord prolapse of the first twin this problem does not arise as it would be the first to deliver.

As the patient came late in labour, it was not possible to confirm clinical impression by rontegenological examination. The present case clinically appears to have two different types of lie. The lie of the first twin presenting by vertex was longitudinal and lie of second twin was oblique. It is said that this abnormal lie is also responsible for premature rupture of membranes. The subsequent measurement of umbilical cord revealed that the second cord was 10 cms. longer than that of the first twin. Therefore, oblique lie, improper filling of lower segment by first twin, increased length of umbilical cord of second twin, multiparity have largely contributed to prolapse of cord of the second twin.

Moir believes that prolapse of cord is a natural sequence to abnormal presentation. The statement stands to reason in single pregnancy but the present case poses an exception. The first vaginal examination did not reveal cord presentation. The cord prolapse was preceded by leaking of

liquor and sustained uterine contractions.

The management of this case also poses the question if high forceps should totally disappear from modern obstetrics? It is agreed by many that a single foetus, with arrest of head at a higher level, is no more an indication for high forceps per se. As already pointed out by Holland high forceps has a definite place in managing the second of twins with vertex presentation and intra-uterine asphyxia. In agreement with Holland we further extend the same indication for an occasional case, as described above with fully dilated cervix and a small sized baby. It is a necessary evil to shorten the delivery of the first twin so as to spare the prolonged compression of cord of the second twin.

Acknowledgment

Our thanks are due to Dr. A. D. Joseph, Dean, Medical College, Baroda, for his kind permission, to report this case for publication and our thanks are also due to Dr. T. V. Patel, Head of the Department of Obstetrics & Gynaecology for his encouragement.

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