

TRANSVERSE LIE

(A study of 37 cases)

by

KALAVATI S. PARIKH,* M.D.

and

S. R. PARIKH,** M.D.

Obstetric emergencies constitute a major problem in a hospital, especially so when it is the reference centre for a number of round-about villages. Irwin Hospital, Jamnagar, is one such centre. Here, the patients are brought from distances varying from 2 to 40 miles, often in conditions ranging from minor degree of shock to being in extremis. In most cases, they are admitted without having previously received even primary aid. At times, even the aid received from a health centre or a village practitioner may affect them adversely, if it included administration of pituitrin which was contra-indicated or an internal examination without proper knowledge in case of antepartum haemorrhage. Sometimes patients are brought in half delivered condition after the application of extreme force. It is easy to understand that at places where such conditions are prevailing patients come with minimum of hope. Relatives are least worried as far as the baby is concern-

ed. What they want is that the mother should be saved. Cheapness of life to their minds is reflected when the question of blood transfusion arises. Whatever the danger to the patient may be, most often they refuse to donate the blood. Under such circumstances, management of transverse lie assumes considerable difficulty.

A review of 37 cases of transverse lie treated at Shri M. P. Shah Medical College and Irwin Group of Hospitals, Jamnagar, between January, 1961 and June, 1963 i.e. 2½ years, is presented. Number of deliveries which occurred during this period was 3,980. The incidence of transverse lie, thus, comes to 1 in 107 deliveries. The incidence given by Mahale at K.E.M. Hospital, Bombay, is 1 in 466, and at Wadia Maternity Hospital, Bombay, is 1 in 202. On an average the figure given varies from 1 in 160 to 1 in 600. Out of 37 cases, 36 were emergency admissions. The only one booked case happened to be the wife of a doctor. Ten belonged to Jamnagar proper whereas 27 cases came from mofussil areas. The cases are reviewed under following heads.

* Lecturer in Obstetrics & Gynaecology.

** Associate Professor of Obstetrics & Gynaecology, M. P. Shah Medical College and Irwin Group of Hospitals, Jamnagar.

Received for publication on 1-7-64.

Age and Parity

Table I shows that maximum num-

TABLE I

Group	I	II	III
Age	18-25	26-35	36 and more
No. of cases	13	21	3

ber of cases fall in the second age group i.e. between the ages of 26 and 35 years. Table II indicates that the maximum number of cases are among multiparae, 18 being grand multiparae—parity above five. Among these there are 2 cases who had trans-

TABLE II

Parity	I	II	III	IV	V	More than five
No. of cases	2	7	2	6	2	18

TABLE III

Condition of Membranes on Admission

	Intact	Ruptured		
		0 to 4 hours	5 to 10 hours	More than 10 hours
No. of cases	7	8	8	14

verse lie in one of their previous pregnancies.

Period of Pregnancy

Only 2 of these 37 cases, according to the history given by the patient, were premature. The history is not very reliable as most of the patients are not in a position to give exact duration of pregnancy. Better information can be obtained by studying the birth weights of the babies and by such studies it is observed that 10 babies in this series were premature.

Time Interval Between Onset of Labour Pains and Admission

Only 4 cases were admitted within 10 hours of onset of pains, 25 cases between 10 and 24 hours, whereas 7 cases came after more than 24 hours.

Time Interval Between Rupture of Membranes and Admission

Seven cases came with membranes intact. Eight came within 4 hours of rupture of membranes, eight cases came between 4 and 10 hours, whereas rest of the patients came more than 10 hours after rupture of membranes.

Complicating Factors

Eleven cases had hand prolapse, 3 cases had cord prolapse and 3 others had hand and cord both prolapsed, on admission. Two cases had antepartum haemorrhage. There was contracted pelvis in 6, twin pregnancy in 4 and hydramnios in one case. The aetiology of transverse lie is given in Table IV.

Management

A. There were two antenatal admissions. One of them was a second

TABLE IV

Aetiology	No. of cases
Multiparity	26
Contracted pelvis	6*
Twin pregnancy	4
Placenta praevia	2
Hydraemnios	1
Uterine anomaly	1

* Three of these cases are included among multiparae, thus indicating combined factors.

para with history of transverse lie in first pregnancy, which was successfully managed by vaginal delivery after external cephalic version. For the transverse lie of the pregnancy under review external cephalic version was done. The patient had a normal vaginal delivery at term which, due to uterine inertia, had to be assisted by a pitocin drip.

The second was a multipara with previous normal deliveries. She was admitted in the last week of pregnancy with transverse lie. External cephalic version was tried but it failed. Later on she developed antepartum haemorrhage, shortly after which labour pains started. As there was very little bleeding, she was allowed to continue in labour till membranes ruptured spontaneously. At this time an internal examination was done; cervix was found completely dilated with shoulder presentation. Internal podalic version and breech extraction was done. She had posterior marginal placenta praevia.

Both the above cases had live born babies.

B. Patients Admitted in Labour

I. Spontaneous delivery with baby doubled up.

One case, a multipara was admitted in labour with h/o antepartum haemorrhage and no bleeding at the time of admission. On abdominal examination, position and presentation of the foetus could not be made out. Foetal heart sounds could not be heard. On internal examination she was found to be a case of marginal placenta praevia with 3/4 dilatation of cervix; shoulder presentation was detected but membranes ruptured accidentally during examination. She had a spontaneous vaginal delivery with baby doubled up. The baby was stillborn weighing 4 lbs. and 6 ozs.

II. External podalic version and artificial rupture of membranes.

Another case of twin pregnancy came with h/o first baby delivered by breech at home. Second foetus was found having a transverse lie. Membranes were found intact. External podalic version was done followed by artificial rupture of membranes and assisted breech delivery. Baby was live-born, weighing 6 lbs.

III. Internal podalic version and breech extraction.

In 22 cases internal podalic version and breech extraction was successfully done. One of these cases came with incomplete dilatation of cervix and intact membranes. She was allowed to continue in labour till cervix dilated completely. Artificial rupture of membranes followed by internal podalic version and breech extraction was done. The baby was live-born.

Another case among these is that of placenta praevia admitted during the antenatal period which has already been discussed.

Remaining cases had full dilatation of the cervix on admission. Internal podalic version and breech extraction was done in all; one of them required forceps application to the aftercoming head.

IV. Embryotomy.

Embryotomy was done in 6 cases, decapitation in one, decapitation and craniotomy in another and decapitation and cleidotomy in the third. Two cases required evisceration. Internal podalic version had failed in one case due to the presence of a contraction ring. Evisceration and craniotomy were done. These are the cases in whom there was very little liquor and five of these had impacted shoulder presentation.

V. Lower uterine segment caesarean section.

Lower uterine segment caesarean section was done in 3 cases. One was a primipara with hand prolapse and impacted in incompletely dilated cervix. The other 2 cases were multiparas with bad obstetric history and all previous babies lost. In spite of this fact both came in as emergencies. Luckily the membranes were intact and foetal heart sounds were good. All the three babies were live-born, that of the primipara developed right-sided Erb's palsy.

VI. Laparotomy.

Three cases were admitted with ruptured uterus — requiring laparotomy. Repair of the tear with ligation of the tubes was done in two and subtotal hysterectomy in the third.

C. General Management

Fluid infusions were given in all the cases. Antibiotics in the form of penicillin and streptomycin were

TABLE V

	No. of cases
A. Antenatal admission	
I External cephalic version	1
II Internal podalic version	1
B. Intranatal admission	
I Spontaneous delivery, baby doubled up	1
II External podalic version and A.R.M.	1
III Internal podalic version and breech extraction	21
IV Embryotomy	6
V Lower uterine segment caesarean section	3
VI Laparotomy	3
Total	37

given to all, supplemented by higher antibiotics as required. It was possible to obtain blood transfusion only in 3 cases of ruptured uterus.

Results

Mother: There was no maternal death. Complications in the form of postpartum haemorrhage in 2 cases, cervical tear in 2 and second degree perineal tear occurred in one. Ten cases had puerperal sepsis.

TABLE VI
Maternal Mortality

Name of author	No. of cases treated	Maternal mortality
1. Rama Vaish	100	3%
2. Webster & Geittmann	100	Nil
3. Present series	37	Nil

Infant: Live-births: 20 (Including one of twin case). Neonatal death: 1. Still-births: 18.

Out of 18 still-births 13 babies were dead on arrival. Foetal heart sounds were doubtful in 2 cases.

Morbidity: Five babies had asphyxia neonatorum. One baby developed Erb's palsy.

TABLE VII
Foetal Salvage

Name of author	Absolute rate	Corrected rate
1. Rama Vaish	57.5%	74%
2. Webster & Geittmann	48%	78%
3. R. S. Mahale	60%	not given
4. Present series	52.6%	73.1%

Baby Weight. Ten babies were underweight i.e. less than 5 lbs. and 8 ozs. Three babies delivered by caesarean section were more than 6 lbs. and 8 ozs.

Discussion

A study of cases of transverse lie admitted during 2½ years period is presented. The incidence in our hospital, of 1 in 107 cases, is relatively high as compared to Bombay hospitals. This is because of higher number of emergency admissions, as already quoted.

Thirtyseven cases of transverse lie have been reviewed. All excepting one were emergency admissions. The incidence of emergency admissions and hence of transverse lie can be reduced if better antenatal care is accorded. Among these cases 75% came from outside Jamnagar; remaining 25% of Jamnagar proper also did not avail of the facilities given by our institution. This is due to ignorance on part of the patients.

The most common aetiological factor observed is multiparity—26 cases. Next to this comes contracted

pelvis—6 cases. Twin pregnancy, placenta praevia, hydramnios and uterine anomaly were also found as other responsible factors. Most of the patients were admitted in advanced labour complicated with prolapse of hand, cord or both. Foetal heart sounds were absent in 13 cases. Cervix was either completely dilated or dilatable in the majority of cases. It is note-worthy that internal podalic version and breech extraction was the line of treatment in 21 cases, which forms a major group. In these cases the vaginal route of delivery did not have an adverse effect on the foetal salvage rate. This we think is due to presence of an adequate pelvis which, with uncomplicated transverse lie, can give equally good results if properly managed. E. G. Winkler and V. W. Cangello, in their article, have mentioned that uncomplicated transverse lie should not be taken as an absolute indication for caesarean section. Early diagnosis, close observation and management by an experienced person can give equally good results if managed vaginally. This applies to our cases in a way that corrected foetal salvage does not fall when patients have come in condition which will allow vaginal delivery. In addition 2 of our cases were allowed to continue in labour till the cervix dilated completely, following this internal podalic version and breech extraction was done without losing the baby.

Embryotomy was done in 6 cases. No case of severe injury in the form of lower uterine segment rupture occurred, in spite of the fact that most of the cases admitted in advanced labour were managed vaginally.

Minor injury in form of cervical tear or second degree perineal tear was noted in three cases. Two cases had post-partum haemorrhage.

Lower uterine segment caesarean section was done in three cases, 2 of which were multiparae with bad obstetric history. The third was a primipara who came early in labour with hand prolapsed and impacted in incompletely dilated cervix. The resort to caesarean section in our series is low. Mahale has made a plea for liberal use of caesarean section in order to improve foetal salvage. S. C. Hall and F. B. O'Brien give an incidence of 90% caesarean section in transverse lie at Methodist Hospital, Brooklyn. We feel that internal podalic version and breech extraction in uncomplicated cases can give equally good results if well managed. We are against too frequent resort to caesarean section.

At a time when advanced countries are focussing their attention towards better foetal salvage our sole attention is required for maternal interest. Environmental influences on our obstetric practice have already been stressed. In spite of this fact our corrected foetal salvage comes to 73.1%, which compares favourably with other reports. Out of 38 babies delivered in the hospital 18 (52.6%) were still-born; 13 of these were dead on arrival and foetal heart sounds were doubtful in 2 cases. Even if we include these 2 in positive on arrival the corrected foetal salvage is 73.1%.

Summary and Conclusion

Thirty-seven cases of transverse lie, treated at Irwin Group of Hospitals and Shri M. P. Shah Medical College,

Jamnagar, are studied. It is observed that most of the cases came as emergencies. A plea is made to have well-equipped health centres in rural areas. Proper mass education can be achieved by frequent visits of health visitors and midwives to various places. Talks on antenatal care, maternal and child welfare also will help. Frequent visits of obstetricians to such centres from district hospitals also require due consideration.

Maternal death in our series is nil and corrected foetal salvage is 73%. These results, to our mind, are satisfactory considering the factors cited above. It is our observation that more and more number of patients are seeking antenatal care and we are thus hopeful of still better results in our next series.

Acknowledgement

Our thanks are due to Dr. A. D. Joseph, Dean, Shri M. P. Shah Medical College and Irwin Group of Hospitals, Jamnagar, for his constant inspiration and helpful criticism for preparing this paper. We also thank him for allowing us to publish this paper.

References

1. Hall, S. C. and O'Brien, F. B.: *Am. J. Obst. & Gynec.* 82: 1180, 1961.
2. Mahale, R. S.: *J. Obst. & Gynec. India.* 13: 205, 1963.
3. Vaish, Rama: *J. Obst. & Gynec. India.* 12: 707, 1962.
4. Webster, Augusta and Geittmann, W. F.: *Am. J. Obst. & Gynec.* 72: 34, 1956.
5. Winkler, E. G. and Cangelo, V. W.: *Am. J. Obst. & Gynec.* 79: 1096, 1960.