

## CHANGING TRENDS IN THE MANAGEMENT OF TRANSVERSE LIE

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### SUMMARY

Two hundred cases of Transverse Lie were analysed over a period of four years from 1958 to 1962 more than 27 years ago at the Nowrosjee Wadia Maternity Hospital, Bombay. We have analysed over a period of one year 24 cases of Transverse lie at the K.E.M.Hospital, Bombay in the year 1984-85. A comparative analysis of the outcome of the same is made in the present study.

The management of transverse lie has changed considerably with the increase in operative delivery. In the 1962 series, the perinatal mortality rate was as high as 50 % and internal podalic version was performed in 40% of the cases. We have depicted a changing trend in the management of this condition showing remarkable decrease in the fresh still birth rate and the maternal morbidity.

### Introduction

Shoulder presentation or transverse lie is an error or polarity of the foetus in which the long axis of the foetus crosses the long axis of the mother. It is an unusual and dangerous complication.

As shown in Table 1, the incidence of transverse lie varies from place to place. At the Guy's Hospital, London, the incidence was 1: 550 consecutive deliveries. At the Methodist Hospital, Brooklyn, New York, the incidence was 1:1200 deliveries.

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TABLE I  
INCIDENCE

<i>Institution</i>	<i>Incidence</i>
Guy's Hospital, London	1 : 550
Methodist Hospital, New York	1 : 1200
Wadia Maternity Hospital, Bombay	1 : 240
K.E.M.Hospital, Bombay.	1 : 100

At the N.W.Maternity Hospital, Bombay, the incidence was 1:240 deliveries whereas our own incidence at the K.E.M.Hospital, Bombay was 1:162 deliveries.

Upto the late 1960's, shoulder presentation was managed more conservatively atleast at the bigger institutions in Bom-

bay. We have here therefore tried to determine the changing trends in the management of this condition in the recent times - especially due to the availability of higher antibiotics and the smaller family sizes. A comparison is drawn between our study with a larger series of 200 cases studied more than 25 years ago.

Shoulder presentations are always pathologic and therefore always demand aid.

### Material and methods

All the cases of transverse lie which presented at the KEM Hospital, Bombay over a period of one year from 1984-1985 were analysed. The total number of deliveries during this period were 3888. The total number of cases of transverse lie was 24. There were 16 emergency admissions and 8 registered cases.

The age group of more than 70% of the cases in both the groups was between 20 to 30 years. However, as shown in Table 3, in the previous series there were 63% cases between parity 3 and more whereas in our series 79% of the cases were primiparae or second para.

TABLE 3  
PARITY

	Parity in percentage		
	0-2	3&4	More than 5
1958-62 series	37	30	33
Present series	79	17	4

The various modes of delivery in different series of transverse lie is shown in Table 4. In the 1958-1962 series, 73% of the patients had vaginal delivery. Whereas in our series only 8% of the patients had a

TABLE 2  
AETIOLOGICAL FACTORS IN PERCENTAGES

	Multi-parity	CPD	Ut.Malform	Pl.Prev.	Ut.Fibr.	Hydram	Unknown
1958-62 series	P4 - 49	8	6	6	1	1	29
Present series	P2 - 42	25	—	13	5	5	10

### Results

The series of 200 cases by Sheth and Irani (1966) from 1958 to 1962 in the same surroundings is compared with the overall results at that time and in the recent past. Table 2 shows etiological factors like multiparity and Cephalo Pelvic Disproportion (CPD) which were the commonest causes of this condition in both the series.

vaginal delivery. The LSCS rate was 22% only in the previous series whereas it was 92% in the present series. The other series of Sikdar K. and N.N.Roy Chowdhary (1980) also show a very high rate of vaginal deliveries. In the present series, 2 internal podalic versions (8% vaginal delivery) were done on dead fetuses.

TABLE 4  
MODES OF DELIVERY IN PERCENTAGE

	<i>Tamaskar</i>	<i>N.N.Roy Choudhary</i>	<i>Sheth &amp; Irani</i>	<i>Present Series</i>
L.S.C.S	32	55	22	92
IPV	63	17	70	8
Destructive operations	2	19	3	Nil
Others	3	9	5	Nil

TABLE 5  
FETAL MORTALITY\*

	<i>Vaginal Delivery</i>	<i>L S C S</i>
King's County Hospital (1951 - 1957)	30%	9.5%
N.N.Roy Choudhary (1974 - 1978)	53%	Nil
Sheth & Irani (1958 - 1962)	43 %	Nil
Present Series (1984 - 1985)	—	Nil

In present series, no vaginal delivery, when fetus was alive.

\* Absent FHS on admission - Not included.

Table 5 illustrates the foetal mortality rate in the various study groups. The series by N.N.Roy Chowdhary(1980) had 53% foetal mortality by vaginal delivery. Our past series by Sheth and Irani (1966) had 43% foetal mortality by vaginal delivery, whereas in our series there was No vaginal delivery performed on a live foetus with transverse lie. In all the three studies we see that there was no foetal mortality with LSCS deliveries. When we say foetal mortality, we do not include patients who came with absent foetal heart sounds on admission.

In the past series, the major complication of rupture uterus took place in 3 cases — two following destructive operations and one following internal podalic version.

In the present series, we had only one case of rupture uterus which was transferred to us with rupture of previous LSCS scar.

#### Discussion

Of all lies which the foetus may assume, Transverse lie is the most unfavourable. It was the view that this malpresentation should always be corrected when it is discovered during routine antenatal examination by external cephalic version (ECV). However, today, as we know the various etiological factors of transverse lie like CPD, Placenta Previa etc. ECV is not practiced as freely as in the past. This was depicted in a study by Hall (1961) of 426 cases from 11 hospitals. Attitude concerning ECV may be summarised as follows:-

"There are those who enthusiastically recommend it, others who violently oppose it, still others who express a rather elegant distaste for it."

Unfortunately, ECV is seldom observed by, or taught to, young doctors during their training years. We feel therefore that lack of training and prevailing scepticism prevent many obstetricians from even attempting it. Should this art be revived in our institution, is a question to be seriously answered, to prevent transverse lie.

Shoulder presentation always needs early intervention if one desires to achieve a good outcome. A full term foetus is not expected to deliver by spontaneous evolution (conduplicato corpore). This may take place exceptionally rarely with a very small foetus and a very large pelvis. If labour is left on its own in Transverse lie, there can be uterine rupture or uterine atony leading to tympania uteris.

Western authors like Greenhill, (1965) do not give importance to IPV even if the baby is dead, due to small families, risks to future pregnancies and the medico-legal aspects. This is not so in our set up. Neglected patients with Transverse Lie come to us more often than in the West. In the previous series 70% of the cases had IPV whereas only 8% had IPV in our series.

Maternal mortality following LSCS is as low as 80 per 1,00,000 LSCS deliveries in the Western countries in contrast to 70 to 700 per one lakh cases in our country. Moreover, morbidity following LSCS is considerable besides the future obstetric outcome is many times gravely affected by the previous LSCS in our country. Med-

ico-legal aspects are not really taken into account here when the case of transverse lie is managed. These aspects change dramatically the management of Transverse lie in the Western countries. Therefore, even today when a patient comes with absent foetal heart sounds with adequate liquor present in experienced hands, IPV still has a place in our set up. It is indeed a gratifying art.

Jack Pritchard and Paul MacDonald (1985) condemn IPV nor is decapitation advocated by them – only an abdominal delivery.

In conclusion therefore, we would recommend:-

- (1) Early diagnosis of this complicated presentation during ante-natal period,
- (2) Eliminating associated factors (Placenta previa, hydramnios, CPD etc. by USG)
- (3) Attempt ECV
- (4) If transverse lie persists at term, deliver patient by elective LSCS.
- (5) If the patient comes as emergency with foetal heart sounds present, perform immediately an emergency LSCS.
- (6) If patient comes as emergency with foetal heart sound absent, perform IPV (if no contraindications like incomplete cervical dilation, inadequate liquor etc).
- (7) If IPV contraindicated (FHS absent) deliver by Caesarean section or a destructive operation should be attempted depending on the facilities available and the experience of the surgeon.

If an early diagnosis is made of Transverse lie, the outlook for both the mother and foetus is excellent. In the neglected cases, however, infection and trauma from ill directed intervention and from operative delivery may make the situation grave. Thus, we see that after 25 years the trend

to manage this condition has moved practically totally towards abdominal delivery.

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