A STUDY OF 40 CONSECUTIVE CASES OF SHOULDER PRESENTATION

by

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Transverse lie, the term used by most clinicians to-day, is one of the most dangerous complications of pregnancy, as only under very exceptional circumstances a spontaneous vaginal delivery is possible. It is a rare condition in the more developed parts of the world, but in India the incidence of transverse lie still remains high. The major factor responsible for this condition is multiparity and lack of antenatal care. A review of 40 consecutive cases of transverse lie admitted and treated in the Government Medical College, Aurangabad, between February 1968 to November 1968 is presented. The hospital serves a wide area and is the only hospital in the region with specialist services. Most of the patients were admitted without receiving any preliminary aid. The majority of cases were admitted late in labour with hand prolapse, absent foetal heart or the foetus in a condition of extreme foetal distress. The mother was exhausted and the uterus was contracted over the foetus.

Incidence

In the present series the number of deliveries from February 1968 to November 1968 was 1,952 and the number of patients admitted as transverse lie and shoulder presentation was 40. The incidence of transverse lie thus comes to 1 in 49 deliveries in this hospital. The incidence is much lower outside India. Hall and O'Brien (1961) gave an incidence of 1 in 217 deliveries, Garber and Ware (1951) reported a still lower incidence of 1 in 419 deliveries. In India, Chakravarty (1964) reported an incidence of 7.5 per thousand deliveries.

Age

Table I shows that the maximum number of patients were between the age of 31 to 38 years. The youngest patient was 18 years and oldest was 43 years of age.

TABLE I

Showing the age incidence in 40 cases of shoulder presentation

Group	Age in years	No. of cases
I	18-22	10
II	23-30	6
III	31-38	16
IV	39 & onwards	8

Parity

Multiparity is said to be an important predisposing factor in transverse lie. The experience in this series has not substantiated this conception completely. Table II in-

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TABLE II
Showing incidence of cases in different parity

Parity	No. of cases
I	10
II	4
III	1
IV	4
V	6
Grand multigravida	15

TABLE III
Showing mode of presentation

Mode of presentation	No. of cases
1 Presentation of upper limb	5
2 Prolapse of hand	30
3 Cord prolapse associated with hand prolapse	14

dicates a high number of primipara, 10 in 40 cases of shoulder presentation, an incidence of 25 per cent. Though the majority of cases were grand-multigravida, i.e. they had five or more pregnancies, there were 21 out of 40 cases of shoulder presentation.

Duration of labour

Out of 40 cases of shoulder presentation, 5 were not in labour. Amongst the 35 patients in labour, 43 per cent were in labour for about 24 hours. The five patients who were not in labour, were admitted for correction of the abnormal lie. In three cases the presentation was corrected spontaneously.

Mode of presentation

Table III shows five patients were seen with presentation of limb either elbow, shoulder or hand. Thirty cases were with prolapse of the hand, of which 16 cases had prolapse of the cord also. The duration of the prolapse of the hand and cord was not known in many cases. Six cases had prolapse of the hand and cord for more than 20 hours in which the foetuses were macerated.

Prenatal care

Five patients, i.e. 12 per cent, received antenatal care and were admitted to the hospital for investigation and correction of the presentation. In two of these patients spontaneous version after the 36th week was performed and they both delivered normally as vertex presentation. The other three patients left the hospital before anything could be done and were not traced. The cases admitted in labour were unbooked cases in advanced labour with varying degree of dilatation of the cervix.

Associated Complications

Rupture of the uterus was present in two cases. In one case it was not diagnosed before laparotomy. Thirty per cent of the foetuses were premature. Arcuate uterus was detected in one case. Partial septum extending from the fundus of the uterus was present in one case. One patient had placenta praevia.

Method of delivery

General management in all the patients consisted of treatment of shock; fluid infusion, broad spectrum antibiotics and blood transfusion were also employed in some of the cases. The method employed in our series for effecting delivery was mostly lower segment caesarean section, internal version and a few destructive operations (Table IV).

TABLE IV
Showing method of delivery

Method of delivery	No. of cases
1 Lower segment caesarean section	18
2 Classical caesarean section	1
3 Internal version	9
4 Embryotomy	4
5 Subtotal hysterectomy	2
6 Spontaneous delivery	1
7 Not in labour	5

Caesarean section

Caesarean section was performed in 19 cases. This included one case of classical caesarean section. This patient had prolapse of the cervix and approach to the lower segment was difficult. She was sterilised at the time of the caesarean section. In only one case was caesarean section done after an unsuccessful attempt at internal version. In most of the cases the uterus was contracted and the membranes had ruptured long before admission to the hospital, as most of the cases were from outstation. One of the patients had a previous classical caesarean section for placenta praevia. This patient had come early in labour with membranes intact and a lower segment caesarean section with sterilization was done. Caesarean section was also performed in a case of twin pregnancy where the first baby was oblique. Of the nineteen patients who had caesarean section, seven had uneventful recovery and twelve had post-operative pyrexia ranging from moderate to severe. Sepsis was controlled in all the cases by antibiotics. Two patients had gross sepsis of the wound. In nine cases the babies were born alive and in 10 they were stillborn. Ten patients were sterilised at the time of caesarean section.

Internal version

In nine cases internal version and breech extraction was done. Caesarean section had to be performed in one case after internal version had failed. In almost all the cases the membranes had ruptured before an attempt at internal version. The cervix was fully dilated in almost all the cases. There was no maternal death and no patient had rupture of the uterus during this manipulation. The uterus was explored in all the cases. Five babies were born alive and four were stillborn.

Embryotomy

The type of destructive operation carried out was decapitation in three cases and evisceration in one case.

Hysterectomy

In two cases hysterectomy had to be done for ruptured uterus. In one case incomplete rupture with broad ligament haematoma was detected after opening the abdomen for caesarean section.

Maternal results

There was no maternal death, as shown in Table V. Pyrexia above

TABLE V
Showing maternal results in 40 cases of shoulder presentation

Maternal results	No. of cases
1 Uneventful (except for pyrexia under 101°F for few days)	28
2 High pyrexia	7
3 Vesico-vaginal fistula	Nil
4 Gross wound sepsis	2
5 Rupture of uterus	2
6 Deaths	Nil

101°F was present in seven patients during the post-operative period. The cause of the fever in most of the cases was either urinary infection or sepsis. Gross sepsis of the wound amounting to disruption was present in two cases. None of the patients had vesico-vaginal fistula. Two patients had rupture of the uterus, in one case the condition was diagnosed only at laparotomy. Both patients made an uneventful recovery.

Foetal results

There were 16 live births, nine were from caesarean sections and five live births were from cases delivered by internal version. In most of the cases the foetal heart was not heard at the time of admission of the patient to the hospital.

Discussion

A study of 40 consecutive cases of transverse lie admitted during a period of 10 months is presented with the object of showing the very high incidence of this abnormal presentation in this particular area. Multiparity was an important associated factor in the study of this series, but at the same time the incidence of primigravidae was also high and most searching investigations failed to reveal any definite cause. Partial uterine septum extending from the fundus of the uterus was detected in one case. Twin pregnancy and partial placenta praevia were also present in two cases.

The management of a case of shoulder presentation is usually by caesarean section, internal version or embryotomy except for an unusual case which can deliver either spontaneously or by spontaneous rectification. In the present series most of the cases were dealt by caesarean section in contrast to the series shown by Vaish (1962). Most of these cases dealt with by caesarean section came late in labour with cervix more than half dilated and the uterus very tightly contracted over the foetus. Some of the cases were interfered outside by midwives and the neck was not within easy reach for decapitation to be performed. In these cases there is a great risk of rupture of the uterus, if any vaginal manipulation is attempted. Even a gentle introduction of the hand inside the uterus may be enough to cause rupture of the lower segment. The risk of infection can always be combated by antibiotics (Chasser Moir, 1964).

Summary

(1) A review of 40 consecutive cases of transverse lie and shoulder presentation is presented in a period of 10 months at Government Medical College, Aurangabad.

(2) The series included five cases admitted before labour and the rest were in advanced labour.

(3) Management of these cases is discussed in details and in most of the cases caesarean section was performed.

(4) Abdominal sterilization was done in ten cases.

(5) There were two cases of rupture of the uterus.

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