

# Shoulder Presentation Changing Trends in its Management in Modern Obstetrics

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## Summary

81 cases of shoulder presentation were analysed in our institution over a period of 2 years, giving an incidence of 1:119. Of these, 59.25% were managed by caesarean section, 32.09% by internal podalic version and in 4.93% hysterectomy was done due to rupture uterus. Out of 43 cases of live birth 36 followed caesarean section and 7 by IPV with perinatal mortality of 51.18%. Maternal mortality occurred in 2 cases.

## Introduction

Transverse presentation is one of the less frequent complications of pregnancy, but it is an important cause of maternal and foetal morbidity and mortality. Due to inadequate antenatal supervision in our country, a large number of cases of shoulder presentation are admitted late in labour, even in this modern age, especially from the rural population

## Material And Methods

All the cases of shoulder presentation who attended J.J.N. Medical College and Hospital, Ajmer from January, 1995 to December, 1996 were analysed, 81 cases of transverse lie were observed. There were 61 emergency admissions and 20 registered cases. In each case a detailed history was taken and mode of shoulder presentation i.e. shoulder, hand prolapse or cord prolapse along with it were observed. The condition of the foetus whether alive

or dead, mature or premature was also taken into consideration and the line of management was decided accordingly.

## Observations

### Incidence

The total number of deliveries during the study period were 9635. Shoulder presentation was seen in 81 cases. The incidence of this abnormal presentation being 1 in 119. The highest incidence was recorded by Kwathekar and Lal (1973) 1 in 25, and the lowest by Mahale (1963) 1 in 466.

### Maternal Age and Parity

Maximum number of patients were between the age 20-29 years accounting for 54.31%. The youngest patient was aged 16 years and oldest was 40 years old.

Twelve (14.81) were primigravida, 60 (74.06%) were between 2-4 para and 9 were grand multiparas.

### Etiological Factors

Table I shows the different etiological factors. Multiparity (64.19%) and prematurity of the foetus (51.19%) were the main etiological factors, while in 12.34% cases no cause could be determined.

**Table No. 1**  
**Etiological Factors in Shoulder Presentation**

Etiological Factors	No. of Cases	Percentage
I. Maternal Causes		
Multiparity	52	64.19
Contracted Pelvis	3	3.70
Placenta Previa	7	8.64
Hydramnios	1	1.23
Congenital anomaly of uterus	3	3.70
II. Foetal Causes		
Prematurity	43	51.19
Twin Pregnancy	4	4.93
I.U.D.	1	1.23
Congenital malformation	2	2.46
III. Unknown	10	12.34

### Duration of Labour

Most of the cases were in advanced labour. 33.33% of the cases were admitted within 6 hours of the onset of labour, while 67.18% had been in labour between 7-24 hours, and 2 cases for more than 24 hours.

### Mode of Presentation

Table II depicts the various modes of presentation. 64.19% cases came with ruptured membranes. Out of these 40.74% had hand prolapse alone and 14.81% had hand and cord prolapse both. Impacted shoulder was detected in 4.93% and rupture uterus in 6.17%.

**Table No. II**  
**Mode of Shoulder Presentation**

Mode of Presentation	No. of Cases	Percentage
1. Upper limb with intact membranes	28	34.56
2. Cord Presentation	1	1.23
3. Prolapse of upper limb	33	40.74%
4. Hand and cord prolapse	12	14.81
5. Hand and foot prolapse	3	3.70
6. Cord Prolapse	2	2.46
7. Impacted Shoulder	4	4.93
8. Rupture uterus	5	6.17

### Management

Table III- In the study 32.09% cases were delivered by internal podalic version, 59.25% were dealt by caesarean section and 3 cases delivered as corpora

conduplicata. Five patients presented with a rupture of the uterus, the rent was repaired in one case and an abdominal hysterectomy undertaken in 4 cases.

**Table No. III**  
**Trends of Treatment in Transverse Lie**

Mode of Delivery	No. of Cases	Percentage
1. Internal podalic version	26	32.09
2. Caesarean section	48	59.25
3. Corpora Conduplicata	3	3.70
4. Rent repair	1	1.23
5. Caesarean hysterectomy	4	4.93

The above observations show that there is no routine treatment for transverse lie in labour.

### Foetal Outcome

Table IV - Out of 83 deliveries, there were 40 still - births and 43 live births, 34 foetuses were dead on admission. The live births included 36 caesarean babies and 7 babies delivered by IPV, 6 babies died during the neonatal period. The total perinatal mortality was 55.42%.

**Table No. IV**  
**Foetal Outcome**

Foetal Outcome	No. of Cases	Percentage
Live Born	43	51.99
Still Birth	40	47.61
Neonatal Death	6	7.40

### Discussion

Lack of proper antenatal supervision continues to be a problem in rural areas of developing countries. On one side newer sophisticated modalities are being developed to have better maternal and perinatal salvage, on the other hand our rural women are deprived of basic aspects of antenatal care.

The most common etiological factor encountered in the series is multiparity being 64.19%. Kwathekar & Lal (1973) and Dalal (1970) also reported higher incidence of transverse lie with multiparity. No cause could be detected in 10 (12.34%) cases in contrast to Hall and O'Brien (1961) in whose series no cause could be found in 79% of the cases.

Most of the patients were admitted in advanced labour complicated with prolapse of hand, cord or both, similar findings were also given by Jacob and Bhargava (1971).

External version, Bipolar version and destructive operations as a method of management of transverse lie

are becoming obsolete now a days with advent of better modes of management.

Internal podalic version was performed on 32.09% of the cases, where the foetus was very premature, dead in utero, cervix was sufficiently dilated and uterus was relaxing in between contractions. This line of treatment was also adopted in the majority of cases by Jacob and Bhargava (1971), Vaish (1962) and Parikh and Parikh (1964) series. Early diagnosis, close observation and management by an experienced person can give good results if managed vaginally. However maternal complications are more frequent in this group as compared to caesarean section. There was 1 case of rupture uterus following I.P.V., a complication also noted by other authors ( Gareis and Ritzenhaler 1952, Mahale 1963).

Caesarean section as a method of treatment for transverse lie is gaining popularity. Mahale (1963) reported an incidence of about 25%, Dalal (1970) about 50% while in the present series 59.25% cases were treated by caesarean section. Caesarean section assures better maternal safety, especially where there are other associated obstetrical factors complicating transverse lie. In early labour with pregnancy near term caesarean section gave good prospect for both mother and foetus whereas in late labour it was performed for maternal safety.

The maternal mortality was in 2 cases in our series. One was due to atonic PPH and haemorrhagic shock and the other was due to cerebral malaria and septicaemia.

From the study it has been concluded that caesarean section is a better line of management in shoulder presentation where the condition of the foetus is good and chances of survival are more. But in conditions where either mode of management i.e. IPV and caesarean section will not affect both maternal and foetal outcome, IPV still has a place as a mode of treatment as it is not wise to give an unnecessary caesarean scar to a patient when we know that the foetal prognosis is not good.

#### References

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