

# THE PLACE OF INTERNAL PODALIC VERSION IN MODERN OBSTETRIC†

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The use of internal podalic version has undergone a phase of transition during the last quarter of century, from a procedure which was performed frequently to one which today is done for relatively few indications. This trend, has been due, to some extent, to adverse criticism of the procedure, as well as to the more frequent use of caesarean section.

The present study is an attempt to evaluate the role of internal podalic version in modern obstetrics.

## Material and Methods

The present series consists of a study of 87 cases of internal podalic version carried out in Lady Elgin Hospital and Medical College Hospital, Jabalpur from January 1961 to December 1970, a 10 years period. This series was compared with 61 cases of caesarean section performed during the same period for similar indications.

## Observations and Comments

**Incidence:** During this period there were 39,098 deliveries, giving an incidence of 0.28% for internal version.

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There were 1976 major obstetric operations giving an incidence of 4.4% for internal podalic version.

**Age:** In both the groups maximum number of patients belonged to the age group 26-30 years, the age of multiparity in India. The number of cases of internal version (IPV) and caesarean section (CS) in this age group being 31 (35.7%) and 24 (39.5%) respectively.

**Parity:** In internal version group, 13 were primiparae, 50 were para II-V, and 15 were grand multipara. The corresponding figures for caesarean section group were 8, 42 and 11 respectively.

**Duration of Pregnancy:** In internal version group 10 cases had pregnancy of 28-32 weeks, 74 (86.2%) had pregnancy of 32-36 weeks and 3 were at full term. The corresponding figures for caesarean section group were, 256 (91.96%), and 3 respectively.

In internal version group maximum patients started labour pains within 2 hours of rupture of membranes. Twelve patients had prolapse of neither cord nor limb, 45 patients had prolapse of hand, 26 had prolapse of cord and 4 had prolapse of cord and limb. Respective figures in caesarean section group were, 29, 25 and 9. The prolapse was present for more than 24 hours in 39 cases of internal version and 29 cases of caesarean

section. Fifty-one foetuses were alive in each group before starting operation. Out of them 15 were still born in first group and 5 in second group, showing that caesarean if performed could save some of the babies in first group.

*Condition of uterus at the time of operation:* 84 cases of internal version and 58 cases of caesarean section had normal uterine contractions. One case in each group had presence of Bandl's ring, and 1 had tonic uterine contraction. While 1 patient with constriction ring was treated by caesarean section, and 1 without uterine contractions was treated by internal podalic version.

*Indications:* Table I shows the indications for operation in each group. Transverse lie alone was indication for 54

TABLE I  
Indications

Indications	Internal podalic version	Caesarean section
Transverse lie	54 (64.36%)	48 (78.68)
Transverse lie with placenta previa	12	4
Second of twin	17	0
Compound presentation	3	6
Unstable lie	0	2
Transverse lie in both babies in twin	1	1
	87	61

(64.36%) cases of internal version and 48 (78.68%) cases of caesarean section.

*Anaesthesia:* 76 cases of internal version and 22 cases of caesarean section had general anaesthesia. 39 cases of caesarean section had spinal anaesthesia. In 10 cases of internal version no anaesthesia was used, the procedure being done after giving  $\frac{1}{4}$  gr. morphia intravenously. One of these patients had

post-partum bleeding, 7 babies were still born, 2 were severely asphyxiated, and 1 child was born alive. In 1 case of twin delivery, the first baby was delivered by forceps under pudendal block. The second foetus had transverse lie, and internal version was done under the same anaesthesia.

Most of these operations were done by senior surgeons, while 26 internal version and 10 caesarean sections were done by residents. The morbidity was similar in both groups.

Table II shows the types of procedures done along with internal podalic version.

TABLE II  
Type of Operation with Internal Version

Operation	No. of cases
Internal version with breech extraction	70
I.P.V. with breech extraction & manual removal of placenta	8
I.P.V. & normal breech delivery	8
I.P.V. & craniotomy of after coming head	1

*Condition of babies at birth:* 36 babies in internal version group and 46 in caesarean section group were born alive. There were 51 still births in first group and 16 in second group (out of them foetal heart sounds were present in 15 cases of first group and 5 cases in second group at the time of operation), while 14 babies in first group and 9 in second group died within 24 hours of birth. The uncorrected and corrected foetal loss in internal podalic version and caesarean section group was 73.5%, 51.02%, and 40.02% and 23.5% respectively.

Table III shows the influence of parity on foetal loss in both groups.

TABLE IV  
Influence of Cervical Dilatation on Foetal Loss

Cervical dilatation	Internal version		Caesarean section	
	Total	Foetal loss	Total	Foetal loss
Quarter	0	0	17	2 (11.8%)
Half	6	6 (100%)	16	4 (25.0%)
Three-fourth	26	22 (84.6%)	10	3 (33.0%)
Full	53	23 (43.4%)	9	4 (44.4%)

In internal version group the foetal loss was inversely proportional to the degree of cervical dilatation, and in caesarean section group it was directly proportional to degree of cervical dilatation (i.e., amount of delay), as evidenced by Table IV.

(transverse lie, face, brow, compound), malposition, (occipito-posterior position), and second of twin, prolapse of cord and placenta previa.

Even today, there is something to be said for version, judiciously employed, in a case of a doctor practicing in a sparsely

TABLE III  
Influence of Parity on Foetal Loss

Parity	Internal version		Caesarean section	
	Total	Foetal loss	Total	Foetal loss
I	13	8 (61.5%)	8	1 (12.5%)
II-V	59	31 (52.5%)	42	11 (26.2%)
VI & above	15	11 (73.3%)	11	1 (9.1%)

**Maternal morbidity:** The incidence of haemorrhage, shock, trauma and sepsis in internal version and caesarean section group were 10 and 4, 4 and 1, 6 and 0, and 51 (57.4%) and 57 (88.5%) respectively. This shows that the infection rate increases if the caesarean section is undertaken late in these cases.

**Maternal mortality:** There were no maternal deaths in either group.

#### Conclusions

The common indications for employing internal podalic version were unengaged head (Menon, 1959), Cephalopelvic disproportion (Cosgrove and Walters, 1940), uterine inertia (Town Bridge, 1950, Ervubgm, *et al* 1954), failed forceps (Aquerio, *et al* 1962), malpresentation

populated area far away from any institution to which he can transfer his patient. A high foetal mortality is inevitable, but maternal mortality should be low in expert hands.

There is a serious risk of rupture of the uterus when the version is done late in labour or with placenta previa or breech extraction is done through incompletely dilated cervix.

Internal podalic version may be considered as an alternative to caesarean section in the following situations:

- (a) Transverse lie with dead foetus and cervix more than half dilated,
- (b) Transverse lie with full dilatation of cervix and a live child,
- (c) Vertex presentation with sudden cord prolapse in para III to V,

- (d) in second of twin with transverse lie, compound presentation or cord prolapse,  
and  
(e) placenta previa with severe bleeding and the patient cannot be shifted to some institution.

In early labour caesarean section gives better prospects both for mother and child, and in late labour it may be performed for maternal safety, because in many cases, the prospects for the child being born alive are nil.

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