

## ROUTINE USE OF FORCEPS FOR THE AFTERCOMING HEAD OF BREECH

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### SUMMARY

The aftercoming head of the breech was delivered with the application of a long forceps in 37 patients at Nowrosjee Wadia Maternity Hospital. An identical number of patients were delivered without forceps to act as the control.

56.76% of the patients were primigravidae; which were almost equally distributed in both groups. A comparative analysis of the two groups showed that there was a significantly higher Apgar score at 1 minute and 5 minutes in the group delivered by forceps. The neonatal morbidity in the group delivered with forceps was (2.7%) less than that in the babies delivered without forceps (16.22%). Prophylactic application of forceps to the aftercoming head of breech is advocated.

### INTRODUCTION

The aftercoming head of a breech delivery poses a problem; wherein the obstetrician's skill, clinical acumen, and judgement is tested. A variety of manoeuvres have been described in the literature for the same; but Munro Kerr (1982) has no hesitation in describing the forceps as the method of choice.

### MATERIAL AND METHODS

A study was conducted at the Nowrosjee Wadia Maternity Hospital, wherein 74 patients with no antenatal problems complicating the pregnancy and with a breech presentation, suitable for vaginal delivery were selected. Each of these patients has previously undergone an ultrasonic scan to rule out any congenital malformations. Half of these patients were delivered by the Mauriceau-Smellie-Veit method, whereas the other half were delivered by applying a long Simpson's

forceps to the aftercoming head of the breech. In both groups a pudendal nerve block and a generous episiotomy were given. A comparative analysis of the two groups was made with respect to parity, birth weight, duration of second stage of labour, and the fetal outcome. The chi square test was used to determine the significance of the result.

**RESULTS**

56.76% of the cases in this study were primigravidae; which were almost equally divided in both the groups. The commonest type of breech in both the groups was a frank breech (Table 1).

**TABLE1**

**PARITY DISTRIBUTION**

Parity	Without Forceps		With Forceps	
	Total n = 37	Total n = 37	Total n = 37	Total n = 37
	n	%	n	%
1	22	59.46	20	54.5
1 - 4	15	40.54	16	43.25
5 & above	0	-	1	2.70

The duration of the second stage of labour was similar in both the groups with twelve patients having second stage prolonged beyond half an hour in the group where forceps was applied as compared to 18 patients in the group where forceps was not applied. The least and the largest birth weights were 1.5 kg and 3.850 kg respectively; both the babies being delivered by forceps. There was a statistically significant improvement in babies born with application of forceps in the 1 minute and 5 minute Apgar scores as compared to the babies delivered without forceps. 89.19% of the babies deliv-

ered by forceps had an excellent Apgar score of 8 and above as compared to 48.65% of the babies delivered without forceps. No baby delivered with forceps had an Apgar score of 3 or below at 1 minute as compared to 9 babies delivered without forceps. (table 2). The 5 minute Apgar scores in the babies delivered by forceps was 7 or less than that in only 1 baby as compared to 11 babies in the group delivered without forceps. (table 3).

**TABLE2**

**APGAR SCORE AT ONE MINUTE**

Apgar 1Min.	Without Forceps		With Forceps	
	n	%	n	%
1 - 3	9	24.32	0	-
4 - 7	10	27.3	4	10.81
8 - 10	18	48.65	33	89.19

**TABLE3**

**APGAR AT 5 MINUTES**

Apgar 5Min.	Without Forceps		With Forceps	
	n	%	n	%
1 - 3	3	8.11	0	-
4 - 7	8	21.62	1	2.70
8 - 10	26	70.27	36	97.30

There was no neonatal mortality in the group delivered by forceps as compared to 2 in the group delivered by Mauriceau-Smellie-Veit maneuver. One of these babies had seizures and hyperbilirubinemia due to an intra cerebral bleeding and the other baby had severe birth asphyxia leading to terminal cardiorespiratory failure. The morbidity in group delivered by forceps was 2.7% as compared to 16.22% in the group delivered without forceps and this included a baby with fractured clavicle (table 4). There were no significant maternal

TABLE

INTRAPARTUM OUTCOMES

	Without Forceps	With Forceps
Number of cases	5	16
Percentage of total	16.22	49.39
Number of complications	2	3
Percentage of total	40.00	18.75

DISCUSSION

Application of forceps as a means of assisting the delivery of the head has been described as early as 1764 by Smellie as quoted by Hensley (1962) and propagated by Crig and Simpson. The advantages are obvious: in the vaginal delivery of the breech the largest and the least compressible fetal part that is the head cannot undergo adaptive moulding and has to pass rapidly through the bony pelvis. Hence the chances of an intra-cerebral bleeding are high due to rapid compression and decompression of intracranial contents with subsequent tears in the falx and the tentorium. Also too slow a delivery of the head would lead to aspiration of amniotic fluid by the baby. Both problems can be avoided to a large extent by forceps application as the speed of delivery of the head is controlled. Also the traction is directly on the skull and not via the spinal column as in other manoeuvres. So chances of injury to neck, back and shoulders are decreased. Lastly due to the sphincter effect created on the fetal neck by the forceps, flexion of the head is maintained.

Although the number of cases in our study is relatively small, the expected fetal

outcome compares well with experience which does not support the use of 1433 type breech delivery by R.J. Fisher (1975) who demonstrated a significantly decreased morbidity and mortality with forceps application. Fisher has devised a special forceps which has blades depressed below the shaft, pelvic curve is reduced and it has long curved shanks which makes it ideal for application. But in its absence a long Stapp's forceps only when difficulties are anticipated or encountered. Routine use of forceps for assisting head of breech is advocated.

ACKNOWLEDGEMENT

We thank the staff of Government Wadia Maternity Hospital for allowing us to carry out this study.

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