# Journal of Obstetrics & Gynaecology of India

**VOLUME XXXIII** No. 4

AUGUST 1983

## Fditorial

### THE PLACE OF MIDFORCEPS IN PRESENT DAY OBSTETRICS

V. N. PURANDARE, M.D., F.R.C.S.E.

The current trend of total condemnation of all mid-forceps deliveries in favour of caesarean sections does not appear to be a healthy obstetric practice. Appropriate indications for the use of mid-forceps or caesarean section in the practice of obstetrics today are neccessarily relative concepts.

In present day obstetrics mid-forceps is indicated in prolongation of second stage of labour due to factors: like: dysfunctional uterine action, relative malposition or malpresentation of foetal head, arrest of head secondary to conduction anaesthesia, and to cut short second stage of labour in presence of foetal distress when the foetal head is at station zero.

#### Maternal Mortality and Morbidity

The bulk of evidence now available clearly suggests that if the maternal interest is the only factor in consideration, then the mid-forceps approach definitely scores over caeserean section. Although the reported complication rates of midforceps today range from 6% to 40% most of these complications are relatively minor—such as: episiotomy extension or vaginal or cervical lacerations.

Mid-forceps approach is of special advantage in infected cases, where labour has been prolonged and the interval between the rupture of membranes and delivery is relatively long. K. Bhasker Rao in his multicentric study on maternal mortality in India has reported that out of 925 maternal deaths, 130 deaths were associated with caesarean section as compared to only 51 deaths associated with forceps deliveries. Gogoi *et al* report a post-caesarean maternal mortality in infected cases of 12 per cent from peritonitis when compared to a maternal mortality of only 2.7 per cent in vaginal deliveries in infected cases. Hence in the presence of infection, when the prerequisites for forceps are fulfilled, mid-forceps may be a better option as compared to caesarean section.

#### Foetal Mortality and Morbidity

The main arguments against midforceps approach centre around foetal interest and many feel that mid-forceps approach compromises the foetal interest. But on closer scrutiny of the available literature one feels that it is not correct to condemn mid-forceps, as most of the recent studies show a perinatal mortality in mid-forceps which is approaching zero, and when the patient selection is good and when skilfully conducted, the foetal morbidity is also low.

Immediate foetal morbidity is difficult to define. Since few studies have dealt with the problem of immediate foetal morbidity, and since no single value has been established to define the morbid infant, the limited data available is such that it can be contrived to support either side of the debate. In most cases, the morbidity is minor, and usually resolves prior to hospital-discharge.

Long-term foetal morbidity is judged from incidence of cerebral palsy, and intelligence. Eastman and associates found a significantly higher incidence of mid-forceps deliveries in cerebral palsy group compared to the controls (10.5% compared to 4.9%). But Steer and Boney found no relationship between forceps deliveries and cerebral palsy. Corston compared 90 forceps deliveries with 76 spontaneous deliveries and noticed equivalent I.Q. scores both in male and female in both these groups.

#### Do forceps protect the baby?

The regular use of forceps for aftercoming head in breech deliveries in the Liverpool maternity hospital is one of the most important factors responsible for the low foetal mortality in that institution as reported by Cox in 1950. Forceps is also said to protect the forecoming head especially in premature baby (Stufford and Salter) or in dysmature baby of a toxemic mother (Lister)—as quoted by Jeffcoate.

Factors which have improved the perinatal results in mid-forceps deliveries over the last 40 years:

(1) Strict adherence to pre-requisites and a better selection of cases.

(2) Avoiding difficult mid-forceps in favour of caesarean section.

(3) Avoiding general anaesthesia in favour of block anaesthesia (Caudal or Pudendal).

(4) Correcting the position of foetal head before or after application of forceps blades.

(5) Cephalic application of forceps as against pelvic application.

(6) Routine use of episiotomy for forceps to avoid perineal injury.

(7) Caution before performing forceps that there is a possibility of (a) unrotated head, and (b) unrecognised disproportion at mid-pelvis or outlet.

#### Comment

At the present time, the bulk of evidence presented does not support the abandonment of mid-forceps technique. The evidence also suggests that the midforceps may be more advantageous than caesarean section in infected cases (provided that the pre-requisites for the forceps are fulfilled). In developing countries like India where poverty, illiteracy and uncontrolled reproduction are the major problems, one cannot be too liberal with caesearean section.

Strict adherence to the pre-requisites, proper selection of cases, and skillful conduction of mid-forceps delivery keeping in mind that it is a Trial Forceps application, will go a long way in making midforceps a safe operation—both for the mother and the baby. Once its safety to the mother and foetus is well-established, it will always continue to have its place in good obstetric practice.

#### References

- Bhasker Rao, K.: Maternity Mortality in in India—a cooperative study; The Journal of Obstetrics & Gynaecology of India. 30: 853, 1980.
- Corston, J. M.: The end results in children delivered by mid of high corceps, Am. J. Obstet. Gynaecology, 67: 263, 1954.
- Eastman, N. J., Kohl, G. S., Maisel, J. E. and Kaveler, F.: The Obst. Gynaecol. Surg. 17: 459, 1962.
- 4. Gogoi, M. P.: Maternal mortality from caesarean section in infected cases. Journal of Obstetrics & Gynaecology of the British Commonwealth, 78: 378-386, 1971.
- Jeficoate, T. M. A.: The place of forceps in present day Obstetrics, Br. Med. J. 4: 4843, 1953.
- Steer, C. M. & Boney, W.: Obstetric factors in cerebral palsy Am. J. Obstet. Gynaecol. 83: 526, 1962.