

FORCEPS APPLICATION AT CAESARIAN SECTION

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SUMMARY

A prospective evaluation of 20 forceps applications used to deliver the fetal head at caesarian section. The indications were a high floating head in 11 cases and an aftercoming head in 9. Forceps use allowed the application of traction, a controlled direction of pull and an easy delivery. On assessment the procedure was satisfactory and maternal and fetal outcome favourable in every case.

Introduction

The delivery of the fetal head through the lower segment caesarian section incision is often a challenging proposition. The forceps, vectis and Murless extractor have all been used to overcome difficulties relating to the engaged head.

Two other conditions occasionally pose unexpected difficulty. The high floating head tends to 'bob' out of reach and fundal pressure often causes a 'wobbling' of the head away from the incision, leading to a delay in delivery. The risks of delivering the aftercoming head particularly in the preterm breech, render it liable to injury whether delivered abdominally or vaginally (Myerscough) 1982.

This study evaluates the use of the obstetric forceps in the delivery of the head at caesarian section.

Material and Methods

Twenty forceps applications were performed at caesarian section over a three year period using the Hay's forceps in 15 and the Wrigley's forceps in 5 cases. The details of the Hay's forceps are available in an earlier publication (Sheriar et al) 1990.

Method of Use

Forceps use was generally anticipated and prophylactic. The traditional recommendation for the cephalic presentation is to hook the chin forward and apply the forceps with the pelvic curve towards the symphysis (Donald) 1985.

We often rotated the floating head occipito-anterior and applied the forceps with the pelvic curve away from the symphysis, delivering the head by extension. The Hay's forceps with its negated pelvic curve was occasionally directly applied in occipito-transverse positions and the head lifted out by lateral flexion.

With the aftercoming head the position was always occipito- anterior and delivery by flexion using the Hay's flexion rotation forceps.

Results and Analysis

Indications for forceps application at caesarian section:

Forceps application was performed for a floating head in 11 and aftercoming head in 9 cases. In 5 cases a placenta praevia was associated with a high floating head and 3 cases had cephalo- pelvic disproportion.

Five of the caesarian sections for breech were performed in primigravidae.

Assessment of Technique

Spinal anaesthesia was used in 16 and general anaesthesia in 4 cases. All forceps applications and extractions were without delay or difficulty. There were no maternal or fetal injuries and no extensions of the uterine incision. The perinatal outcome was favourable in all cases.

Discussion

Many instruments have been used to overcome difficulty in delivering the fetal head at caesarean section. The short Hale forceps was specially devised for this purpose. However the prime indication of this and other instruments is the delivery of the engaged head (Douglas and Stromme) 1975.

As discussed earlier the floating and aftercoming head often present problems at delivery. The difficulty with the floating head is in guiding the head through the uterine incision while with the aftercoming head an easy, atraumatic delivery by flexion is important.

The use of the forceps had definite advantages. The delivery of the head was easy and the blades occupied minimal space in the incision. The application of traction and a controlled direction of pull helped in the delivery of the

floating head while a controlled flexion of the floating head facilitated easy breech delivery.

In our opinion the Hay's forceps because of it's slender blades, negated pelvic curve and parallel branches that prevent the application of head compression has a definite advantage, the straight Simpson's short obstetric forceps being a viable alternative for these indications.

It is important that every obstetrician be familiar with this application of the forceps and that the instrument be available whenever needed at caesarian section.

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References

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TABLE I
Indications for forceps application at caesarian section

Indications	
Delivery of a floating head:	
Placenta praevia	5
Cephalo-pelvic disproportion	3
Previous caesarian section	2
Fetal distress	1
Delivery of an aftercoming head:	
Primigravida with breech	5
Previous caesarian section	2
Footling breech	2