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Role of Forceps in Modern Era

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ABSTRACT

Instrumental vaginal deliveries like forceps and vaccume delivery were quite popular in older times, but their role in modern era are controversial. Objective of the study was to determine incidence of forceps delivery and its role in modern obstetrics

50 patients were included in this study who were delivered by outlet forceps. Decision of forceps delivery was taken on basis of parity, labour duration, station, foetal and maternal condition. Written consent and all prerequisites were taken care of.

Incidence of forceps delivery was comparable to ACOG(2011).Most were easy delivery with forceps without any major injury to mother or foetus. Forceps delivery doesn't need anaesthesia, it can be done under perineal infiltration only.

In modern obstetrics where caesarean section is preferred to difficult vaginal delivery, Forceps delivery still has a definitive role as it is safe , easy and quick procedure to deliver a distressed foetus in emergency.

KEYWORDS: instrumental vaginal delivery, modern era

INTRODUCTION

Instrumental vaginal deliveries like forceps and vaccume deliveries were very popular in older times. But in modern era, their role is controvertial.

Now a days due to newer safer caesarean techniques, safe anesthetic practices and good outcome of caesarean section, instrumental deliveries are less and less preferred.

Vaccume delivery is preferred than forceps delivery, but still, sometimes forceps delivery is more useful. For many years since its discovery, forceps has faced tough times and out of all hurdles, it has survived till today. The forceps has improved maternal and fetal salvage, of course with properly selected patients.

Forceps deliveries were originally classified as –outlet forceps

Low forceps
Mid forceps
high forceps
(now not included in present classification)

According to ACOG (1994) and SGOG (2005) –high forceps deliveries are not recommended in modern obstetric practice.

MATERIALS AND METHOD

This is a prospective study of 50 cases of forceps delivery carried out in our institution from July 2011 to April 2013 .The study carried out as the classification guidelines for forceps delivery in ACOG 2002[5].

The patients included were examined properly and depending upon their parity, labour duration, station of foetal head, foetal well being and maternal condition , they were selected for forceps delivery.

Forceps used were Wrigley's outlet forceps with proper consent of patients as well as relatives.

Out of 50 patients, 20 patients were primi parous patients , having foetal distress or prolonged 2nd stage of labour. While 30 patients were multiparous patients ,having either maternal indication or delayed 2nd stage of labour .Most forceps deliveries were done under perineal infiltrations only, but in 6% cases , trial forceps were done under spinal anaesthesia.

In majority of patients wide mediolateral episiotomy was given, which was sufficient. But in 15 patients minor injuries to mother were present which were not affecting maternal health significantly. Neonatal morbidity was minimal.

TABLE 1. INCIDENCE-

No of vaginal Deliveries	No. of forceps deliveries	Incidence(%)	ACOG[6] 2011
6450	50	0.77%	0.8%

TABLE 2 .TYPE OF FORCEPS-

TYPE OF FORCEPS	NO. OF CASES(%)
OUTLET FORCEPS	48(96%)
LOW FORCEPS	02(4%)

TABLE 3. INDICATIONS-

INDICATIONS	NO.OF CASES(%)
Prolonged 2nd Stage	16(32%)
Foetal distress	14(28%)
Severe Anaemia	9(18%)
preeclampsia	5(10%)
VBAC	4(8%)
Cardiac disease	2(4%)

TABLE 4. Anesthesia

TYPE OF ANAESTHESIA	NO. OF CASES (%)
Spinal anaesthesia	3(6%)
Perineal infiltration	47(94%)

TABLE 5. BIRTH INJURIES-

TYPE OF INJURY	NO.OF CASES(%)
IMPRESSION MARKS	6(12%)
ABRASION ON FACE	3(6%)
CEPHAL HEMATOMA	2(4%)
MINOR FACIAL PALSY	1(2%)

TABLE 6. MATERNAL INJURIES-

TYPE OF INJURIES	NO. OF CASES(%)
EXTENDED EPISIOTOMY	4(8%)
VAGINAL TEAR	10(20%)
MULTIPLE TEAR	1(2%)

DISCUSSION

Forceps delivery still has significant place in Obstetrics as it is a life saving procedure for both foetus as well as mother in many situations as it is a simple , speedy and comparatively safe procedure as it has a protective mechanism to foetus and mother both . In skilled hands, forceps is the instrument of great value to reduce maternal efforts and foetal morbidity by shortening the second stage of labour in high risk pregnancies like heart disease, anaemia, preeclampsia, previous Lscs etc.

Prophylactic use of forceps has been proposed as a safe alternative to LSCS to cut short the second stage of labour. Goal of forceps delivery is to minimise injury to foetus , as it forms a protective cage around head during traction and in mother, it prevents morbidity of injury to bladder and bowel . Proper clinical assessment and adherence to the basic principles will reduce the chances of failure and complications. Overall rates of maternal morbidity and mortality in forceps delivery are comparable to spontaneous vaginal deliveries.

Over the years , as rate of caesarean delivery has been increased, and rate of instrumental delivery has been fallen, still American College of Obstetrics and Gynaecology (2001) recommends forceps delivery as an acceptable and safe option for delivery.[7]

Thus forceps delivery is definitely a life saving procedure even in this "Caesarean era", where certain maternal or foetal condition does not permit time for preparations of LsCs and quick delivery of baby is needed. Thus forceps delivery has small but definite role in modern Obstetrics.

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