

# DESTRUCTIVE OPERATIONS IN A TEACHING HOSPITAL

by

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## Introduction

The place of destructive operations in modern obstetric is highly controversial. In most of the Western countries leaving aside the special case of hydrocephalic foetus, caesarean section has without any doubt superseded this complicated procedure. But in developing countries like India, it is still practised in rural obstetrics. It may even has to be taken up in teaching institutions in our set-up to

of 49351 deliveries, out of which normal vaginal deliveries were 38996, caesarean sections 5166, forceps deliveries 4829, destructive operations 122 and deliveries by other methods 238. The ratios of destructive operations were then 1 in 404 amongst total deliveries, 1 in 320 amongst spontaneous vaginal deliveries 1 in 42 in relation to sections, 1 in 40 in relation to forcep deliveries and 1 in 2 in relation to other methods.

TABLE I  
Shows the Year Wise Distribution

Types of operations	1974	1975	1976	1977	1978	1979 (July)	Total
Craniotomy	11	14	13	15	13	8	74
Decapitation	1	2	-	-	-	-	3
Evisceration	3	7	8	11	8	5	42
Spondylotomy	1	-	-	-	-	2	3
Total Destructive Opn.	16	23	21	26	21	15	122

safeguard the immediate and remote maternal complications.

## Materials and Methods

The present study consists of analysis of 122 cases of destructive operations undertaken in Eden Hospital covering a period of 5½ years from January 1974 to July 1979. During this period there was total

## Analysis

The above Table shows that the incidences of destructive operations, yearwise did not vary significantly.

**Craniotomy:** Seventyfour craniotomies were indicated for (a) hydrocephalus, 12 cases including 1 case of aftercoming head of breech, (b) cephalopelvic disproportion, 36 cases where mild disproportion was observed in 20 cases and moderate in 16 cases of vertex presentations (anterior position) and (c) specially infavourable

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position of foetus (26) such as impacted face 5, impacted brow 6, and occipitoposterior 15.

All these 74 cases were unbooked and were brought late in labour from rural areas. Of these 74 mothers 35 were primigravida, 30 were mults (para 1-4) and 9 were grandmultis. Twenty-nine of them were below 20 years, 37 were in between 21-30 years, 6 were in between 31-40 years and 2 were above 40 years. All of them belonged to low socio-economic status. Duration of labour varied in between 18 to 46 hours. Associated maternal disorders were present in 21 cases, pre-eclampsia in 15 and anaemia in 6.

Craniotomy was performed on dead foetus except in 7 cases of hydrocephalus where the foetuses were alive.

*Maternal Morbidity:* Minor to severe morbidity was encountered in 22 cases, although resuscitative measures with antibiotics, oxytocics, blood transfusions etc. were undertaken prior to or along with the surgery. Three cases suffered from severe primary P.P.H. Bladder was injured in 1 case. Perforation of the uterus and broad ligament haematoma occurred in 1 case. Cervix was torn in 2 cases and laceration of vaginal wall including incomplete perineal tear was detected in 3 cases. Vulval haematoma developed in 1 case, 5 suffered from puerperal sepsis and 6 patients developed urinary tract infection.

*Maternal Mortality:* There were 3 maternal deaths, 1 occurred when craniotomy was undertaken on an aftercoming head of hydrocephalic baby, the patient died of severe P.P.H. Second case was an eclamptic mother who died due to left ventricular failure after 2 days, whose foetus was extracted by craniotomy for contracted pelvis. In the third craniotomy was done for C.P.D. During exploration, uterine perforation was detected on the

right side of lower segment with broad ligament haematoma. Immediate laparotomy, subtotal hysterectomy and drainage of haematoma was done but the patient died of irreversible shock.

*Decapitation:* This was undertaken on 3 cases of transverse lie with impacted shoulder presentation and hand prolapse where the babies were already dead. All of them were brought from outside after prolonged labour. Two were primigravida and 1, a 3rd gravida. One was below 20 and another 2 were in between 21 to 30 years. There was no other maternal complication except arcuate uterus in 1. There was no maternal mortality but 1 suffered from vaginal laceration.

*Eviscerations:* This operation was undertaken in 42 cases. It was indicated in 39 cases of transverse lie with impacted shoulder presentations and hand prolapse where neck was not easily approachable. It was also undertaken for 2 cases of huge foetal ascitis with dystocia in delivering foetal trunk where the foetues were still alive and 1 case of sacro-coccygeal teratoma of foetus where difficulty was encountered after expulsion of the foetus up to the umbilicus. However, even evisceration failed to deliver the baby completely when L.S.C.S. had to be done after transecting the baby at the level of umbilicus.

Twenty-one of these 42 cases were primigravidas, 18 were mulligravidas (2-4) and 3 were grandmultis. Fifteen of these 42 were below 20 years, 23 were aged in between 21 to 30 and 4 were in between 31 to 40 years. Most of them belonged to low middle class family, being referred from rural hospitals. Duration of labours in them varied from 24-48 hours. Associated maternal complications such as pre-eclampsia was present in 7 and anaemia in 5.



*Maternal Morbidity and Mortality*

Morbidity was present in 9 cases, 3 suffered from P.P.H. and shock, 1 had cervical tear, perineal laceration in 1 case and puerperal sepsis in 4 cases. There was no maternal mortality.

*Spondylotomy:* In this series 3 spondylotomies were undertaken for 3 hydrocephalic foetuses, in 2 of them there was no difficulty in deliveries of the breech presentation up to the neck, when difficulties were encountered to deliver the aftercoming head of the foetuses. Careful exploration revealed the hydrocephalic condition and spondylotomy was undertaken. Both of these mothers were multigravidas. The 3rd patient, a primigravida with moderate anaemia and mild toxæmia was admitted in labour with the baby born up to the neck. As difficulty arose in delivering the aftercoming head, exploration was done which revealed the hydrocephalic condition and spondylotomy was undertaken. There was no morbidity or mortality.

*Difficulties Encountered During Operations*

Difficulties in the extraction of the head after perforation was encountered in 19 cases of craniotomy amongst total 74, when the station of the head was at brim. Cranioclasts slipped away several times. The parietal and part of occipital bones were detached along with slipped cranioclast when difficulty was faced in proper application of the instrument. There was also difficulty in perforating the aftercoming head of breech even with hydrocephalus or in face presentations. Three cases of decapitations had difficulty in severing the neck and taking out the severed necks after decapitations. During evisceration operation difficulty was en-

countered in case of 1 sacrococcygeal teratoma as described before.

*Evisceration vs Decapitation*

The former is much safer operation and is associated with lesser complications than the latter as observed in this series.

*Comments*

The indications and complications of 122 cases of destructive operations undertaken in a teaching hospital have been described. Many workers (Stabler 1949) advocated caesarean sections in preference to destructive operations and excepting special cases of hydrocephalus foetuses. This was the accepted principle of treatment against dangerous and repugnant operation of craniotomy in Western Countries (Moir and Myerscough 1972). However, Bhowmick (1974), Gogoi (1971), Palanichamy (1975) and Dutta and Pal (1978) reported the justifications of undertaking destructive operations in our country. These operations are however not without risks and exploration of uterus should be mandatory as perforations, rupture of uterus and severe P.P.H. may occur. In the present study there was 1 perforation, incidence being 0.81% against 4.4% as reported by Dutta and Pal (1978).

The incidence of craniotomy amongst various destructive operations is very high. In this hospital the incidence of this operation amongst total deliveries is 1 in 600 approximately. In India the incidence varies from 1 in 125 to 1 in 5000 deliveries (Dawn 1978). In this series there were 3 deaths amongst 74 craniotomies incidence being 4%, but corrected figure should be 2 (2.7%) when death due to left ventricular failure in eclampsia is excluded.



The overall mortality of the present series amongst all destructive operations was 2.4% (3). The figures from whole of India is 2 to 8% (Dawn 1978). The corrected mortality of the present series is however 1.6% (2 cases). The uncorrected and corrected mortality following caesarean sections are 2.99 and 0.66% respectively (Roy Chowdhury and Sikdar 1978). The corrected maternal mortality again amongst elective and emergency sections of this hospital is 0.54 and 0.71% (Sikdar *et al* 1979). Thus the uncorrected mortality from destructive operations is slightly less than the corresponding figures following caesarean sections but corrected mortality from destructive operations is higher than caesarean sections, either elective or emergency or totals. Though apparently it appears that caesarean section is safer than destructive operations, in our country this should not be considered as an alternative procedure because not only the incidence of uncorrected mortality following caesarean section is higher but sections also jeopardise the future obstetric performances of mothers when most of them live in rural areas with inadequate facilities.

Advantages of Blonde-Heidler Thimble and saw over decapitation knife or saw or hook, which are commonly used in this hospital are that the former procedure is safer and less barbarous (Benson 1978).

However, it is needless to emphasize that, experience is necessary in destruc-

tive operations for safe vaginal delivery. Assessment of patient to avoid over exhaustion due to this procedure is also important.

This study showed that in India even in teaching institution destructive operations have its own indications and usefulness as observed in the unchanged hospital yearly incidences.

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