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Destructive operations in modern obstetrics

Received: 21 February 2005 / Accepted: 25 April 2005 / Published online: 1 July 2005
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Abstract This is a retrospective study carried out over a period of 7 years at a tertiary care hospital to evaluate the indications, types and complications of destructive operations. During this period, 51 destructive operations were performed on women with obstructed labor and intrauterine fetal death. The most common operation performed was craniotomy (68.62%) followed by decapitation (19.60%), evisceration (7.84%) and cleidotomy (3.92%). The most common indication was cephalopelvic disproportion (31.25%). Out of 53 babies delivered (one triplet delivery), two were grossly malformed and 49.05% babies had birth weight between 3.0 kg and 4.0 kg and 9.43% were macrosomic. A total of 45.09% women had complications like atonic PPH, vaginal and perineal tears, puerperal sepsis and urinary tract infection. However, there was no maternal death. It is felt that for the women who belong to poor socio-economic status and have poor compliance and who present late in labor with features of obstruction, intrauterine sepsis and fetal death, destructive operation is still a good option.

Keywords Obstructed labor · Destructive operation · Intrauterine fetal death

Introduction

Destructive operations in obstetrics are rapidly becoming a lost art, due to the fact that few artisans are available

today and moreover in most of the developed countries, the standard of living is better and obstetrics is so advanced that these operations are rarely indicated. In a country like India, antenatal care in rural areas is meager and many patients still present late in labor with intrauterine fetal death, signs of obstruction and infection in the mother. A cesarean section done in such a situation results in a stillborn baby and a woman with a weak scarred uterus jeopardizing her future obstetric outcome and predisposing her to a risk of ruptured uterus. Therefore, alternative methods of delivery like destructive operations are desirable. The obstetrician, however, needs to be conversant with the technique and certain criteria are required to be fulfilled prior to undertaking these procedures. Bhoumick [2] stressed that as long as we get badly handled and neglected cases we cannot eliminate the need to perform destructive operations. Destructive procedures in obstructed labor cases with dead or moribund fetuses are superior to LSCS [5].

Materials and methods

This is a retrospective study undertaken in the Department of Gynaecology and Obstetrics, Pt. B.D. Sharma PGIMS, Rohtak (Haryana). This institute is the only tertiary referral center in Haryana and hence caters to a large obstetric population. The period of the study spans from January 1997 to December 2003. A total of 51 destructive operations were performed during this period. Hydrocephalic fetuses in which only cephalocentesis was done were not included in the study. The data regarding age of the woman, parity, socio-economic status, residence, condition of the woman at admission, type of destructive operation and complications were analyzed.

Results

A total of 51 destructive operations were performed and the total deliveries conducted during this period was

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Table 1 Type of destructive operations

Type of operation	Number of patients (%)
Craniotomy	35 (68.62%)
Decapitation	10 (19.60%)
Evisceration	4 (7.84%)
Cleidotomy	2 (3.92%)
Total	51

Table 2 Type of destructive operations

Indication	Number of patients (%)
Cephalopelvic disproportion	19 (37.25%)
Deep transverse arrest	14 (27.45%)
Brow presentation	1 (1.96%)
Face presentation	2 (3.92%)
Neglected shoulder presentation	11 (21.56%)
Preterm locked babies (triplet)	1 (1.96%)
Fetal ascites with multiple gross congenital malformations	1 (1.96%)
Shoulder dystocia	2 (3.92%)

38,965. Hence, the incidence of destructive procedures is 0.13%. The results are shown in Table. 1–4. Most of the women (74.5%) were young, in the age group of 20–30 years, 19.60% were more than 30 years and 5.80% were less than 20 years. Only 19.68% were primigravida and so 80.40% were multigravida at the time of admission. All the women were unbooked with no antenatal care and belonged to rural areas, had poor socio-economic status and came late in labor with intrauterine fetal death. At the time of admission, all the women were in a miserable condition, dehydrated and with signs of obstructed labor. The first and second stage of labor was prolonged by more than 24 h in 38 women (74.5%), between 12 h and 24 h in 9 (17.64%) and only in four of them the duration was less than 12 h; all these four women were multigravida. There was history of leaking pervaginum for more than 24 h in 49.01% (25/51) women, predisposing them to sepsis due to unhygienic surroundings in which they managed by traditional birth attendants.

The total number of babies delivered was 53 (one triplet delivery), including 33 male babies and 20 female babies. A majority of the babies were between 3 kg and 4 kg i.e., 49.05 and 9.43% were macrosomic with birth weight more than 4 kg (Table 3).

Two patients in whom evisceration was done had congenitally malformed babies, one had fetal ascites with multiple malformation and the other had a tumor in the neck. The rest of the babies did not have any gross congenital malformation.

A few complications were reported. One patient had ruptured uterus, which occurred while performing decapitation and was managed by hysterectomy subsequently. Six patients had atonic PPH and were medically managed by giving oxytocics. Another six patients had multiple vaginal and perineal lacerations at the time of

Table 3 Birth weight

Birth weight (kg)	Number of patients (%)
≤ 3.0	22 (41.60%)
3.0–4.0	26 (49.05%)
> 4.0	5 (9.43%)

Table 4 Complications

Complications	No. of cases (%)
Rupture uterus	1 (1.96%)
Atonic PPH	6 (11.76%)
Vaginal tears	4 (7.84%)
Perineal laceration	2 (3.92%)
Puerperal sepsis	4 (7.84%)
Urinary tract infection	6 (11.76%)
Total	23 (45.09%)

admission as they were badly handled by traditional birth attendants.

Continuous bladder drainage was done for a minimum of 2 weeks in all the patients after the procedure. Average hospital stay was 14.6 days. Most of the patients were hospitalized for 15 days, except for two patients who took discharge on request with catheter in situ after 4 days and another two patients had to be admitted for 3 weeks due to grade II puerperal sepsis. All the women who developed sepsis and urinary tract infection postoperatively were managed conservatively.

Discussion

The clinical problem of obstructed labor with dead fetus is still faced in developing countries even in this modern era. This fact is highlighted in the present study where 51 destructive operations were performed over a period of 7 years. Most of these women were badly managed by traditional birth attendants, had prolonged labor with signs of obstruction. The incidence of destructive operation is 0.13% in the present study as compared with other studies which reported the incidence from 0.094% to 0.25% [1, 4, 10]. The slightly lower incidence in the present study may be due to the fact that these are the figures of recent years, while the other studies are older and were carried out in the 1980s and early 1990s, when more women were reporting to the hospital in moribund condition.

Among the destructive operations, incidence of craniotomy was 68.62%. Almost the same incidence, 68% (45/75), as that reported by Goswami et al. [6]. Cephalopelvic disproportion was the most common indication of craniotomy in the present study and the same was observed by Sahu et al. [9] and Biswas et al. [3]. Evisceration in the present retrospective review was performed in 7.84% cases, and Biswas et al. [3] and Modak et al. [8] performed evisceration in 36% (9/25) and 35% (23/66) cases respectively.

In present study, the birth weight of fetuses was between 3 kg and 4 kg in 49.05% of the cases. Whereas, the majority of the fetuses were between 2.5 kg and 3 kg group in the study by Biswas et al. [3]. The mean birth weight was 2.84 kg in 77% of cases in the study by Konar et al. [7].

Maternal complications were seen in 45.09% with no maternal death and only one case of ruptured uterus following decapitation. Similarly, one case of ruptured uterus was reported by Goswami et al. [6] and Biswas et al. [3] out of 75 and 25 women, respectively. No other serious morbidity like vesico-vaginal fistula or peritonitis was observed in the women subjected to destructive operation. This was possible due to the fact that the women were operated upon by senior obstetricians trained in destructive operations.

Conclusion

In the present circumstances, until the quality of life improves in developing countries destructive operations performed on well-selected patients by an experienced obstetrician who is conversant with the technique can be a boon for a woman's obstetric career, saving her from the peril of mortality due to ruptured uterus resulting from a weak scar. Though unpleasant to

perform, the technique is of great relief to patients and their families.

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