

## The use of intrapartum defibulation in women with female genital mutilation

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**Objective** To assess the use of intrapartum defibulation for women who have had female genital mutilation.

**Design** A retrospective case analysis.

**Setting** King Abdulaziz University Hospital, a teaching hospital in Jeddah, Saudi Arabia.

**Sample** Two hundred and thirty-three Sudanese and 92 Somali women who were delivered at the hospital between January 1996 and December 1999.

**Methods** The outcome of labour of women with female genital mutilation who needed intrapartum defibulation were compared with the outcome of labour of women without female genital mutilation who did not need intrapartum defibulation.

**Results** One hundred and fifty-eight (48.6%) women had infibulation and needed intrapartum defibulation to deliver vaginally, 116 women (35.7%) did not have infibulation and gave birth vaginally without defibulation, and 51 (15.7%) women were delivered by caesarean section. There were no statistically significant differences, between women who underwent intrapartum defibulation and those who did not, in the duration of labour, rates of episiotomy and vaginal laceration, APGAR scores, blood loss and maternal stay in hospital. The surgical technique of intrapartum defibulation was easy and no intraoperative complications occurred.

**Conclusions** Intrapartum defibulation is simple and safe, but sensitivity to the cultural issues involved is essential. In the longer term, continuing efforts should be directed towards abandoning female genital mutilation altogether.

### INTRODUCTION

Female circumcision, or female genital mutilation is a deeply rooted and centuries old traditional practice<sup>1</sup>. Although its exact prevalence is not known, estimates suggest that between 100 and 132 million women have been subjected to female genital mutilation. It is practiced mainly in 26 African countries, where prevalence rates range from 5% to 99%<sup>2</sup>. In Sudan and Somalia, for example, more than 90% of the women have had female genital mutilation<sup>3</sup>, but patterns of immigration now mean that women with female genital mutilation are likely to be encountered throughout the world.

Female genital mutilation is defined by the World Health Organization (WHO) as procedures which involve partial or total removal of the external female genitalia or other injury to the female genital organs whether for cultural or any other non-therapeutic reasons<sup>3</sup>. There

are various classifications for the different types of female genital mutilation but the procedures most frequently performed are removal of the prepuce, excision of the clitoris, excision of the clitoris and labia minora, and occasionally excision of much of labia majora with suturing of the two sides together to occlude the vagina<sup>4</sup>. This latter procedure is known as infibulation and is sometimes referred to as pharaonic circumcision.

The practice of female genital mutilation is not confined to Muslims. Its origins are traditional and cultural rather than religious<sup>5,6</sup>. Unfortunately, the practice of female genital mutilation still remains widespread, with its attendant health risks.

Many of the short and long term complications of female genital mutilation have been well documented, including infection, tetanus, haemorrhage (sometimes leading to death), depression, sexual dysfunction, and obstetric complications<sup>4</sup>. Clearly childbirth for infibulated women presents special requirements for health care professionals. It is essential to recognise that female genital mutilation, as part of the women's culture and traditions, must be dealt with sensitively<sup>7,8</sup>. At the same time, procedures are needed to ensure a safe delivery and to avoid complications, particularly in infibulated women in whom there is increased risk of prolonged or obstructed labour, fetal death, perineal tears, postpartum haemorrhage, and maternal death. The use of defibulation has proved effective in reducing these risks, but still tends

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to be little used in the developed world<sup>9</sup>. Arguably, this has increased the likelihood of complications and the number of unnecessary caesarean sections. The aim of this study was to assess the use of intrapartum defibulation for women who have had female genital mutilation.

## METHODS

The study was undertaken at the King Abdulaziz University Hospital, a teaching hospital that provides complete obstetric care for women of all socio-economic backgrounds, from both Saudi Arabia and neighbouring countries. Obstetric care is free, and the women are encouraged to use the booking system, but some pregnant women still arrive in labour without receiving any antenatal care. The hospital policy is to provide intrapartum management and delivery conducted by residents and senior residents under consultants' supervision. Intrapartum continuous fetal heart monitoring is carried out for almost all pregnant women. Unfortunately, epidural anaesthesia is not available in our hospital. Pain relief in labour is provided by intramuscular administration of pethidine and phenergan.

The practice of intrapartum defibulation as carried out at King Abdulaziz University Hospital involves assessment of the woman with female genital mutilation followed by counselling and discussion of the procedure to be adopted. Before the procedure, the woman is placed in the lithotomy position, the vulva and perineum are cleaned with chlorhexidine, and the bladder is emptied using a catheter. The defibulation involves infiltrating the anterior scar tissue with 1% lidocaine and inserting the index and middle fingers of the left hand between the crowning head and the scar tissue, and then cutting the scar in the middle between the two fingers during uterine contractions. Midline or mediolateral episiotomy may or may not be necessary. After delivery, sutures are inserted for haemostasis if required. Finally, a Foley's catheter is inserted and kept *in situ* for 24 hours and routine postpartum care is provided.

The medical records of all Sudanese and Somali women who gave birth at the hospital between January 1996 and December 1999 were analysed retrospectively to ascertain whether intrapartum defibulation was required (dependent on whether they had had female genital mutilation and the nature and extent of the mutilation). The outcome of labour of women with female genital mutilation who needed intrapartum defibulation was compared with the outcome of labour of women without female genital mutilation who did not need defibulation. Statistical analysis was performed using SPSS-PC for windows. Version 6.1. Student *t* test,  $\chi^2$ , and Fisher's exact test were used as appropriate. A *P* value  $\leq 0.05$  was considered statistically significant.

**Table 1.** Maternal characteristics. Data are presented as mean [SD] or *n*(%).

Variables	Defibulation ( <i>n</i> = 158)	No defibulation ( <i>n</i> = 116)
Age (years)	30.47 [5.01]	29.95 [5.17]
Gravidity	4.46 [2.34]	5.03 [2.8]
Parity <sup>a</sup>	2.97 [2.09]	3.57 [2.5]
Primigravidae	22 (13.9)	11 (9.5)
Weight (kg)	81.57 [14.57]	79.58 [15.51]
Height (cm)	161.17 [6.15]	160.61 [5.54]
Antenatal risk factor(s)	68 (43)	59 (50.9)

<sup>a</sup> *P* = 0.03.

## RESULTS

During the study period 233 Sudanese and 92 Somali women were delivered in our hospital. One hundred and fifty-eight women (48.6%) had infibulation and needed intrapartum defibulation to deliver vaginally, 116 women (35.7%) did not have female genital mutilation and gave birth vaginally without defibulation, and 51 women (15.7%) were delivered by caesarean section. The maternal characteristics of the women who were delivered vaginally with or without intrapartum defibulation are shown in Table 1. There were no statistically significant differences between the two groups in the occurrence of antenatal risk factors, such as diabetes mellitus, hypertensive disorders, anemia, urinary tract infection, and previous caesarean section.

A significantly higher number of women who needed intrapartum defibulation had been 'booked' to receive antenatal care (142, 89.9%), compared with those who did not require defibulation (89, 76.7%, *P* = 0.003). However, there were no statistically significant differences in the duration of labour (e.g. first, second, and third stage), rates of episiotomy and vaginal laceration, APGAR scores, blood loss and maternal stay in hospital (Table 2). The surgical technique of defibulation was easy and no intraoperative complications occurred.

Of the 51 women (15.7%) who had a caesarean section, 28 (8.6%) had an elective caesarean section

**Table 2.** Outcome of labour. Data are presented as mean [SD] or *n* (%).

Variables	Defibulation ( <i>n</i> = 158)	No defibulation ( <i>n</i> = 116)
Booked <sup>a</sup>	142 (89.9)	89 (76.7)
First stage (min)	354.4 [186.1]	380 [189.6]
Second stage	14.2 [35]	12.5 [14.2]
Third stage	6.1 [4.3]	5.3 [2.5]
Blood loss (ml)	187.7 [103.4]	178.2 [104.8]
Episiotomy	64 (40.5)	51 (43.9)
Vaginal laceration	18 (11.4)	16 (13.8)
Birth weight (gm)	3276.8 [523.9]	3270.3 [523.9]
APGAR (1min)	8.4 [1.3]	8.6 [1.2]
APGAR (5 min)	9.8 [1.1]	9.7 [1.1]
Maternal stay (days)	1.6 [1.4]	1.9 [1.8]

<sup>a</sup> *P* = 0.003.

and 23 (7.1%) an emergency caesarean. Of those in the elective group, 13 had female genital mutilation but, in none of these women, was the decision to proceed with caesarean section based solely on female genital mutilation status. In the emergency caesarean section group, 10 women had had female genital mutilation. Three women with female genital mutilation underwent emergency caesarean section for failure to progress, compared with four women without female genital mutilation for the same indication. The remaining caesarean sections were done for other obstetric reasons.

## DISCUSSION

Childbirth for infibulated women presents a special situation. Failure of the health care professionals to acknowledge that female genital mutilation exists and is part of these women's culture and tradition may lead to hostility and incomprehension in some situations<sup>7,8</sup>. In addition to sensitivity and non-judgmental care, special steps are needed to take account of the specific effects of female genital mutilation. For many women, defibulation is necessary to avoid unnecessary complications. This study shows that, with proper management, there is no statistically significant difference in outcome of labour between women who deliver vaginally, with and without defibulation. This is consistent with other published reports<sup>10</sup>. The number of women in the study who delivered by emergency caesarean section for failure to progress was too small to assess whether female genital mutilation was a significant contributory factor.

In Sudan and Somalia the predominant type of female genital mutilation is infibulation<sup>3</sup>. Women with infibulation usually know that they require defibulation for safe vaginal delivery and this may explain the higher percentage of women with female genital mutilation who booked their hospital care. The antenatal setting usually provides an opportunity to identify and discuss the obstetric issues arising from female genital mutilation including antenatal defibulation. In 1995 McCaffrey *et al.*<sup>11</sup> suggested that antenatal defibulation under spinal anaesthesia is ideal for their Somali migrant women. This is thought to prevent acute problems at the time of delivery related to the risk of unfamiliarity of the staff on duty with defibulation. However, in our circumstances where

the staff are very familiar with intrapartum defibulation and the results achieved reflect this, we continue to perform intrapartum defibulation.

Although defibulation has been shown to be safe and effective, health care professionals cannot fail to be concerned about the overall problems associated with female genital mutilation. There is a continuing need for health education which stresses the risks and complications of female genital mutilation, while explaining that the origin is more of tradition and culture than of religion. However in the Muslim world, such a change of attitude towards the procedure has to come from within and cannot be successfully imposed from outside<sup>12</sup>. In conclusion, although the surgical technique of intrapartum defibulation is simple and safe, this should not undermine the continuing efforts towards abandoning female genital mutilation altogether.

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