External Cephalic Version: A Survey of Current Practice Among Nigerian Obstetricians

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Abstract

Context: Although external cephalic version (ECV) has been shown to reduce the incidence of breech presentation at the onset of labour and the rate of caesarean section for this indication, these benefits will only be realised if all obstetricians practice ECV in appropriate cases.

Objective: To assess the practice of ECV among Nigerian obstetricians.

Study design, Setting and Subjects: A self-administered questionnaire survey of Nigerian obstetricians who attended the Annual General Meeting and Scientific Conference of the Society of Gynaecology and Obstetrics of Nigeria (SOGON) held in Enugu, South Eastern Nigeria in November 2001.

Results: Out of the 165 conference participants, 126 responded to the questionnaire, giving a response rate of 76.4%. Sixty-six (52.4%) respondents did not perform ECV while 60 respondents (47.6%) performed ECV for breech presentation. There was a greater tendency for the older obstetricians to perform ECV for breech presentation than the younger ones ($\Box^2 = 9.7$, df = 2, p = 0.008). The reasons given by the 66 respondents who did not perform ECV ranged from an inordinate fear about the risks of ECV to the lack of knowledge about how to perform it.

Conclusions: All obstetricians ought to accept the current scientific evidence in support of term ECV for breech presentation. They should counsel their patients on the risks and benefits of ECV vis-à-vis those of vaginal breech delivery and elective caesarean section. The patient would then be in a position to make an informed choice. Finally, ECV should be made one of the procedures residents ought to do before being considered eligible for the final postgraduate examinations in Obstetrics and Gynaecology.

Key words: ECV, current practice, Nigerian obstetricians

Introduction

The optimal management of breech presentation has remained controversial amongst obstetricians. Earlier audits of vaginal breech deliveries revealed such poor fetal outcomes that liberal caesarean section was advocated^{1,2,3}. Studies of planned vaginal breech deliveries applying defined criteria for selecting women with breech presentation for vaginal breech delivery have reported excellent results^{4,5,6}. Such good reports have not been validated in Nigeria. In terms of maternal outcome, vaginal delivery is generally preferable to caesarean section as it avoids the operative complications of a major abdominal surgery⁷. Avoidance of caesarean section whenever possible is especially desirable in a country such as Nigeria where, for socio-cultural reasons, there is an aversion to caesarean section⁸.

External cephalic version (ECV), which converts breech presentation to cephalic presentation thereby eliminating all the problems associated with breech presentation, is probably the ideal management of breech presentation. Despite the controversies about ECV, randomised controlled studies have clearly demonstrated its benefits in reducing the rate of caesarean section in breech presentation without any increased risk to the

Baby^{4,9}. These benefits of ECV will only be realised if the majority of obstetricians practice it. This study assessed the practice of ECV among Nigerian obstetricians. Hopefully, the results of the study would be useful not only in influencing Nigerian obstetric practice but also in directing postgraduate training on the optimal management of breech presentation.

Materials and Methods

The study sample consisted of Nigerian obstetricians who attended the Annual General Meeting and Scientific Conference of the Society of Gynaecology and Obstetrics of Nigeria (SOGON) held in Enugu, South Eastern Nigeria in November 2001. The instrument used for the study was a semi-structured questionnaire. The questionnaire enquired about a respondent's age, length of practice, practice base, practice of ECV, gestational age at which ECV is performed, where it is performed, use of tocolysis and ultrasonography and length of time patient is observed after the procedure. Data analysis was by descriptive and inferential statistics using SPSS for MS Windows version 10.0. For inferential statistics, proportions were compared by means of chi-square tests at the 95% confidence level.

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Results

Out of the 165 conference participants, 126 responded to the questionnaire, giving a response rate of 76.4%. In terms of the six geo-political zones in Nigeria, the respondents' practices were located as follows: South-East 60 respondents; South-South 18 respondents; South-West 21 respondents; North-East 6 respondents; North Central 18 respondents and North-West respondents. Six (4.8%) respondents were 30 years or less in age, 51 (40.5%) respondents were aged 31-40 years, 48 (38.1%) respondents 41-50 years, 12 (9.5%) respondents 51-60 years and 9 (7.1%) respondents more than 60 years. Their post qualification experiences as obstetricians were distributed thus: less than 4 years of practice 48 (38.1%) respondents; 4-8 years of practice 42 (33.3%) respondents; and more than 8 years of practice 36 (28.6%) respondents.

With respect to the practice of ECV, 66 (52.4%) respondents did not perform ECV under any circumstance while 60 respondents (47.6%) performed ECV for breech presentation in a multipara or grandmultipara. On the other hand, 33 (26.2%) of the respondents performed ECV for breech presentation in a primigravida while the remaining 93 (73.8%) did not. There was a greater tendency for the older obstetricians to perform ECV for breech presentation than the younger ones ($\times^2 = 9.7$, df=2, p=0.008, Table 1).

Table 1 Number (percentage) of the respondents practicing external cephalic version according to their professional experience

| Length of practice | No practicing ECV | Percentage |
|--------------------|-------------------|------------|
| Less than 4 years | 15 | 25.0 |
| 4 8 years | 18 | 30.0 |
| More than 8 years | 27 | 45.0 |
| Total | 60 | 100.0 |

$$(^2 = 9.7, df = 2, p = 0.008)$$

With respect to the timing of the ECV, 9 (15%) of the 60 respondents who performed ECV on a multipara did so at about 34 weeks, 42 (70%) at term, while the remaining 9 (15%) did so at any time (preterm or term) depending on when the breech presentation was discovered. All the 60 respondents performed ECV outside the theatre, with three doing so under ultrasound guidance and the rest without ultrasound guidance. Regarding the use of tocolysis for ECV, 33 (55.0%) respondents never used tocolytics, 21 (35.0%) rarely used tocolytics, while 6 (10.0%) used tocolytics in the majority of their cases. Following ECV, the respondents observed the women for 9.8 ± 19.6 (range: 0.5-72) hours. The reasons given by the 66 respondents who did not perform ECV are given in Table 2. They ranged from an inordinate fear about the risks of ECV to the lack of knowledge about how to perform the procedure.

Table 2

Reasons given by 66 Nigerian obstetricians who do not perform Version external cephalic

| Reasons | No | % |
|--|----|------|
| The risks of ECV far outweigh those of either vaginal breech delivery or caesarean section | 56 | 85.0 |
| Lack of practical exposure during the residency training | 25 | 37.5 |
| Uncertainty about success makes it not worthwhile | 25 | 37.5 |
| ECV does not reduce the incidence of term breech delivery | 8 | 12.5 |

Discussion

With the current SOGON membership at over 500¹⁰, it is debatable whether the views expressed by the 126 respondents in this study were representative of the views of all Nigerian obstetricians. In order to increase the number of respondents, a postal survey was contemplated before the SOGON conference but was not embarked upon because of the inefficient postal services in Nigeria, which might have resulted in a high non-response rate. In the authors' opinion, the sample of respondents seems representative given the distribution of their ages and post-qualification experiences and the fact that all the geo-political zones of Nigeria were represented.

There is also the possibility that the location of the conference venue might have affected the spectrum of people who attended the conference. However, Enugu, the conference venue, was the capital of the old Eastern Region of Nigeria and is accessible by road and air. Thus although more than half of the respondents were from the South East geopolitical zone of Nigeria probably because the conference venue was easily accessible to them by road, the authors do not think that accessibility to the conference venue was really a problem since any person who had wanted to attend from any other part of Nigeria could have done so by air or road.

Even if the sample was not representative of the views of all Nigerian obstetricians for the reasons mentioned above, it is a fact that people who usually attend scientific conferences are more likely to be up to date in their disciplines than those who do not. This suggests that the proportion of respondents in this study who knew the current scientific data about ECV was likely to have been higher than that of those who did not attend the scientific conference. Given the above weaknesses, we can make some inferences from this study.

It was rather surprising that only approximately half of the respondents practiced ECV. The implication is that the remaining half offered vaginal breech delivery and caesarean section as the only options to women whose Babies present breech. Whether this is optimal in a country where women dislike caesarean section⁸ is a matter of opinion. However, the current scientific evidence is that ECV significantly reduces the incidence of breech presentation at the onset of labour and thereby reduces the contribution of breech presentation to the caesarean section rate without any increased risk to the baby^{4,9,11,12}. From the reasons given in Table 2 by the obstetricians who did not perform ECV, it is clear that some of them were either not well informed about these recent scientific data in support of ECV or, if they were informed, refused to accept the data. These were mainly the older obstetricians while those who did not perform it due to lack of practical exposure were the younger obstetricians.

Among those who practiced ECV, the finding that the older obstetricians performed the procedure much more frequently than the younger ones could be explained thus. While the younger obstetricians probably knew the benefits of ECV, they might not have had the practical exposure on how to perform it during their residency training especially if their supervising consultants were not favourably disposed to it. With increasing age and experience, those of them who become convinced about the procedure then acquire the knowledge through trial and error.

The variation in timing of ECV among those who practiced it also deserves some comment. The current recommendation is that ECV be done at term. By this time any spontaneous reversion from breech to cephalic presentation would have occurred and in the event of any complication of ECV, the baby is mature enough to be safely delivered. This study revealed that only about two-thirds of those who practiced ECV did so at term. This means that in some of the remaining one-third of cases, ECV would have been unnecessary since spontaneous reversion might have occurred.

We are now in an era of evidence-based medicine as well as consumerism in obstetrics. If the current scientific evidence in the management of breech presentation is in support of term ECV, then all obstetricians ought to accept this and counsel their patients with breech presentation on the risks and benefits of ECV vis-à-vis those of vaginal breech delivery and elective caesarean section. The patient

should then be in a position to make an informed choice. An obstetrician's personal prejudice against ECV should not be allowed to obscure this truth. Finally, we suggest that ECV be included as one of the procedures, which residents ought to do before being considered eligible for the final postgraduate examinations in Obstetrics and Gynaecology.

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