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Nishimura (2000), Agindotan et al. (2003), (Kelebeni, 1983), (Usman and Smith, 2001), (Chege, 1998; Stein, 1987a,b; Tijani, 1993,1995), (Kumasi et al., 2001)

References should be listed at the end of the paper in alphabetical order. Articles in preparation or articles submitted for publication, unpublished observations, personal communications, etc. should not be included in the reference list but should only be mentioned in the article text (e.g., A. Kingori, University of Nairobi, Kenya, personal communication). Journal names are abbreviated according to Chemical Abstracts. Authors are fully responsible for the accuracy of the references.

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ARTICLES

Vaginal birth or repeat caesarean section: women's preferred mode of delivery after a primary caesarean section in Maiduguri, Nigeria
Babagana Bako*, Ado Danazumi Geidam, Ibrahim Mohammed Sanusi, Abdulkarim Garba Mairiga and Bilkisu Isa

Rhabdomyosarcoma followed six episodes of squamous cell carcinoma in a Nigerian albino: A case report
Vaginal birth or repeat caesarean section: women's preferred mode of delivery after a primary caesarean section in Maiduguri, Nigeria

Babagana Bako*, Ado Danazumi Geidam, Ibrahim Mohammed Sanusi, Abdulkarim Garba Mairiga and Bilkisu Isa

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Vaginal birth after caesarean section (VBAC) is an acceptable option for delivery in a woman with one prior lower segment caesarean section (CS) and in the absence of an obvious contraindication to vaginal delivery. This was a cross sectional study that sought to explore the preferred mode of delivery (VBAC or CS) in a cohort of post operative patients that had a primary CS and the reason for such preference using a self administered, structured and pretested questionnaire. The study was conducted between 1st January, 2013 and 30th November, 2013 and consenting women were recruited consecutively. Two hundred and forty five consenting women completed the questionnaires. Majority of the women, 73.5% (180) prefer VBAC in their next pregnancy while 26.5% (65) prefer a repeat CS. The commonest reasons for preference for VBAC were faster recovery, 68.8% (124) and being a natural method of child birth 25.6% (46). The most common reasons for preferring CS were to avoid labour pains, avoid the stress of labour and safety of the baby in 49.5% (32), 24.6% (16) and 15.4% (10), respectively. Maternal age ≥35 years and having attained tertiary level of education maintained statistically significant relationship with preference for CS after controlling for confounding variable. Only 6.1% (15) of the women reported that they will not accept CS under any circumstance and 31% (76) will accept it reluctantly. We advocate the need for counselling of antenatal women as well as public education campaigns so that women can make informed choices.

Key words: Vaginal birth after caesarean section (VBAC), caesarean section (CS), anaesthesia, aversion, labour.

INTRODUCTION

Caesarean section (CS) rates have risen globally and repeat elective CS is one of the main reasons for the rise in Maiduguri, Nigeria (Geidam et al., 2009). In an effort to reduce the rising CS rate, various regulating bodies (ACOG, 2010; NIH, 2010), have suggested a trial of labour after CS to attempt a vaginal birth as an acceptable option for a woman who has undergone one prior CS with a lower segment transverse uterine incision.

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and in the absence of an obvious contraindication to vaginal delivery. It is estimated that 60 to 80% of women who are considered candidates for a trial of labour after CS will have a vaginal delivery (Mozurkewich and Hutton, 2000).

It has been shown that women who have had a prior vaginal birth in addition to one prior CS are more likely to have a vaginal birth after caesarean section (VBAC) compared with women without a prior vaginal delivery (Olagbuiji et al., 2010), and for the subset of women with prior vaginal birth as well as a CS, a trial of labour as opposed to an elective repeat caesarean delivery is associated with a decreased rate of major maternal morbidities, postpartum fever and need for blood transfusions (Cahill et al., 2006). The chances of a VBAC are also increased when labour starts spontaneously and shows normal progress regarding cervical effacement and dilatation (Omole-Ohonsi et al., 2007). One prior CS, that was performed early in labour and for a non recurrent indication is another factor that favours VBAC (Cunningham and Wells, 2013). In cases where the trial of labour fails, delivery will be accomplished by emergency CS with its attendant risk.

Research has suggested that women who experience a trial of labour followed by an emergency CS may have their expectations quashed and the inability to be delivered vaginally could have serious emotional and psychological trauma that might hinder adjustment to motherhood (Chigbu et al., 2007a; Fenwick et al., 2003). In addition, failed VBAC is associated with a higher incidence of chorioamnionitis, postpartum hemorrhage, blood transfusion, uterine rupture, and hysterectomy (Oboro et al., 2010). A recent study in a tertiary hospital showed that a failed vaginal delivery among women with previous CS is associated with adverse neonatal outcomes with potential developmental risks (Olsunya and Solanke, 2009). This could also increase the risk of litigation to the obstetrician and even more when the condition is somewhat predictable (Oboro et al., 2010; Omole-Ohonsi, 2011).

While trial of labour is generally advocated for the aforementioned reasons, caesarean delivery is also increasingly been seen as a viable option to vaginal delivery even in the absence of medical or obstetrics contraindication to vaginal birth (Pakenham et al., 2006). It could be speculated that this may not be unconnected to the recent trends in patient centred maternity care and greater attention being paid to the women’s views. Studies have shown that women’s satisfaction with their experience of childbirth is related to their degree of involvement in decisions regarding delivery and that lack of involvement in the decision-making process is associated with an increased risk of litigation (Chong and Mongelli, 2003). Equally important in the decision making is the woman’s previous experience of childbirth and a negative birth experience may affect future childbearing. About 20 to 60% of all pregnant women experience fear of childbirth to some degree (Rouhe et al., 2009; Okonkwo et al., 2012). Approximately 20% of women who have given birth suffer from post-traumatic stress disorder (Modarres et al., 2012; Ayers et al., 2006), which can create fear of future childbirths.

Previously, aversion to CS was the norm in our environment in Nigeria because of the associated mortality (Ozumba and Anya, 2002). Furthermore, most women perceived vaginal delivery as a fulfilment of womanhood with them often take pride from having a vaginal birth (Aziken et al., 2007). However, with increasing safety of CS even in the developing world, the aforementioned view might have changed with some evidence suggesting that some women may even request caesarean delivery (Okonkwo et al., 2012; Chigbu et al., 2007b; Chigbu and Ezennyeku, 2008). Also a study amongst antenatal attendees in Nigeria showed that 81.2% of the women interviewed would accept caesarean delivery if their life or that of their fetus is in danger (Sunday-Adeoye and Kalu, 2011).

Previous studies in Nigeria have examined CS on maternal request and choice of mode of deliver among antenatal women, but we are not aware of any study that assessed the choice of mode of delivery amongst women with previous CS. These women have the experience of a prior caesarean delivery and their choice about their subsequent delivery may be different from that of the general population and the finding can be of importance in counselling for future deliveries.

PATIENTS AND METHODS

This was a cross sectional study conducted at the department of Obstetrics and Gynaecology, University of Maiduguri Teaching Hospital, Maiduguri between 1st January, 2013 and 30th November, 2013. The hospital is the major tertiary hospital in the northeast region of Nigeria. The available hospital data showed that 3271 deliveries were conducted in 2012 with a CS rate of 15.2%. Using the aforementioned data, the required sample size was calculated to be 196 and with an additional 20% for attrition, this was rounded up to 245. Post partum women who had been delivered via primary CS were sampled. Data were collected 5 to 7 days after the operation and before being discharged.

Self-administered, structured, pretested and validated questionnaires were instituted after explaining the research and obtaining consent. The questionnaire contained 17 items with both open and closed ended questions. The questions were also translated into the local language to ascertain that the patients truly understand. Patients were asked about their preferred mode of delivery in the next pregnancy and also choice of anaesthesia. They were asked to indicate the reason for their choice. Their view on repeat CS was also sorted and graded. This grading was an adaption from previous published work in Nigeria (Sunday-Adeoye and Kalu, 2011). The grading was as follows: very good, will accept CS by choice to avoid the complications of labour, labour pains and safety of the baby; good, will accept CS if their life or that of their baby is in great danger; bad, will reluctantly accept CS if the doctor says so; very bad, will not accept CS under any circumstance.

Other questions included: patients’ sociodemographic characteristics, the type of CS, indication, type of anaesthesia and their awareness of the right to request a caesarean delivery without...
the right to decide on the mode of delivery but only about half of them, 45% (110) were aware that they could request for CS in the absence of any medical indication. Women's view on repeat CS is as shown in Table 3. Only 6.1% (15) of the women reported CS as very bad and they will not accept CS under any circumstance and 31% (76) reported it as bad and will accept it reluctantly.

**DISCUSSION**

This study shows that majority of the women report a preference for VBAC after a primary CS. This stand is welcomed in contemporary obstetric practice with the growing concern over rising CS rate reported in most centres. Many studies have supported the efficacy and safety of VBAC after one CS and reliable figures of success rate and complications are available for counselling women (Mozurkewich and Hutton, 2000; Olagbuiji et al., 2010; Cahill et al., 2006). A similar preference for VBAC has also been reported in the UK among women with the experience of both CS and vaginal delivery (Aslam et al., 2003).

Some of the women see vaginal delivery as the natural method of child birth and even more appealing to them is the faster recovery after a vaginal delivery as compared to CS. These are the reasons given by more than 90% of the women that choose VBAC for their next delivery. It was also discovered that, VBAC is preferred by younger (<35 years) and women with less education (secondary school or less). Also most of the women of low socioeconomic status prefer VBAC which might be accounted for in part by cost consideration. Cost is an important factor in our region where majority of the hospitals operate the policy of pay-as-you-go for health care services. The preference for CS among women of high socioeconomic class has earlier been reported in Turkey (Buyukbayrak et al., 2010) and Australia (Roberts et al., 2012).

Older women and those with higher education were found to be more likely to choose CS for their next delivery after a prior CS. These women might view their pregnancies as 'precious' and are less willing to risk vaginal delivery. This may be because of concerns about baby's safety in addition to avoiding pains and stress of labour.

Good counseling can allay patient's anxiety and proper intrapartum fetal monitoring could allow detection of fetal distress and appropriate action could be instituted to save the baby. However, epidural anaesthesia is not readily available in our setting because of lack of man-power and that could make the management of tocophobia difficult. It is therefore encouraged that such women should be delivered in settings that can make epidural available for them and be encouraged to attempt VBAC.

With the advancement made in CS, more than 60% of the women studied viewed a repeat CS as at least good and are willing to accept it if their life or that of their baby
Table 1. Factors associated with preference for CS in the next delivery.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Preferred CS (%)</th>
<th>Preferred VBAC (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age (year)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;35</td>
<td>44 (21.9)</td>
<td>157 (78.1)</td>
<td>201 (100)</td>
</tr>
<tr>
<td>≥35</td>
<td>21 (47.7)</td>
<td>23 (52.3)</td>
<td>44 (100)</td>
</tr>
<tr>
<td>$\chi^2=12.36$, P=0.000, OR=1.49, CI=1.12-2.66</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Parity</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Nulliparous</td>
<td>10 (13.2)</td>
<td>66 (86.8)</td>
<td>76 (100)</td>
</tr>
<tr>
<td>Parous</td>
<td>55 (14.8)</td>
<td>114 (85.2)</td>
<td>169 (100)</td>
</tr>
<tr>
<td>$\chi^2=0.81$, P=0.451, OR=0.88, CI=0.12-2.48</td>
<td></td>
<td></td>
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<tr>
<td><strong>Living children</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>63 (26.6)</td>
<td>174 (73.4)</td>
<td>237 (100)</td>
</tr>
<tr>
<td>No</td>
<td>2 (25.0)</td>
<td>6 (75.0)</td>
<td>8 (100)</td>
</tr>
<tr>
<td>$\chi^2=0.10$, P=0.92, OR=1.02, CI=0.68-1.53</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Educational level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary or less</td>
<td>27 (18.9)</td>
<td>116 (81.1)</td>
<td>143 (100)</td>
</tr>
<tr>
<td>Tertiary</td>
<td>38 (37.3)</td>
<td>64 (62.7)</td>
<td>102 (100)</td>
</tr>
<tr>
<td>$\chi^2=10.31$, P=0.001, OR=2.55, CI=1.43-4.56</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Social class</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>22 (17.3)</td>
<td>105 (82.7)</td>
<td>127 (100)</td>
</tr>
<tr>
<td>Middle</td>
<td>16 (26.2)</td>
<td>45 (73.8)</td>
<td>61 (100)</td>
</tr>
<tr>
<td>High</td>
<td>27 (47.4)</td>
<td>30 (52.6)</td>
<td>57 (100)</td>
</tr>
<tr>
<td>$\chi^2=18.23$, P=0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Type of CS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>33 (41.3)</td>
<td>47 (58.7)</td>
<td>80 (100)</td>
</tr>
<tr>
<td>Emergency</td>
<td>32 (19.4)</td>
<td>133 (80.4)</td>
<td>165 (100)</td>
</tr>
<tr>
<td>$\chi^2=13.20$, P=0.000, OR=2.92, CI=1.62-5.26</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Type of anesthesia</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>17 (19.8)</td>
<td>69 (80.2)</td>
<td>86 (100)</td>
</tr>
<tr>
<td>Spinal</td>
<td>48 (30.2)</td>
<td>11 (69.8)</td>
<td>159 (100)</td>
</tr>
</tbody>
</table>

Table 2. Multinomial logistic regression analysis for factors associated with preference for CS in the next delivery.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Odd ratio</th>
<th>95% Confidence interval</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age (Years)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≥35</td>
<td>2.46</td>
<td>1.98-4.34</td>
<td>0.0001</td>
</tr>
<tr>
<td>&lt;35</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Parity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiparity</td>
<td>1.32</td>
<td>0.74-4.73</td>
<td>0.09</td>
</tr>
<tr>
<td>Primiparity</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Living children</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>3.15</td>
<td>0.56-18.90</td>
<td>0.19</td>
</tr>
<tr>
<td>No</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Table 2. Cont’d.

<table>
<thead>
<tr>
<th>Educational level</th>
<th>Tertiary</th>
<th>2.33</th>
<th>1.22-4.37</th>
<th>0.01</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Secondary or less</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

| Type of CS | Elective | 1.52 | 0.76-3.04 | 0.24 |
|            | Emergency | - | - | - |

| Type of anaesthesia | General | 1.16 | 0.29-1.23 | 0.64 |
|                     | Spinal | - | - | - |

Table 3. Women’s view on repeat CS.

<table>
<thead>
<tr>
<th>S/N</th>
<th>View of the women</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Very good</td>
<td>50</td>
<td>20.4</td>
</tr>
<tr>
<td>2</td>
<td>Good</td>
<td>104</td>
<td>42.4</td>
</tr>
<tr>
<td>3</td>
<td>Bad</td>
<td>76</td>
<td>31.0</td>
</tr>
<tr>
<td>4</td>
<td>Very bad</td>
<td>15</td>
<td>6.1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>245</td>
<td>100</td>
</tr>
</tbody>
</table>

is in danger. However, 6.1% are aversive to repeat CS and will not accept it under any circumstance. Our findings could mean that aversion to CS may be lower than previously thought in our environment particularly among the women with previous CS. This calls for more counseling of our antenatal women and community education in order to make women accept CS when necessary.

One of the limitations of the study was that the patients’ prior infertility and treatments were not taken into account. Most patients that conceive following infertility treatment may be more disposed towards CS delivery. Secondly, the patients were recruited 5 to 7 days after surgery and their choice of mode of delivery may differ after complete recovery. A larger multi-centre study on antenatal patients may be required to further buttress our findings.

Conclusion

Most women will prefer VBAC after a primary CS and this is more likely among younger, less educated and women of middle and low socioeconomic status, while CS is preferred by the older and highly educated women. We advocate for counselling of antenatal women as well as public education campaigns so that women can make informed choices.

Conflict of Interest

The authors report no conflicts of interest.

REFERENCES


Case Report

Rhabdomyosarcoma followed six episodes of squamous cell carcinoma in a Nigerian albino: A case report

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Beginning from 1975, a Nigerian albino aged 27 years developed squamous cell carcinoma that recurred a total of seven times, the last being a rhabdomyosarcoma in 2005 at the age of 61 years. In this context, we are aware of published cases of carcinoma but not of sarcoma. With special reference to albinism, squamous cell carcinomas superabound. If at all, resections are scarcely carried out more than once.

Key words: Rhabdomyosarcoma, squamous cell carcinoma, albino, Nigeria.

INTRODUCTION

Albinos, who are distinguished by their lack of skin pigmentation stand out among the dark-skinned individuals. They also differ on account of cancer caused by exposure to sunlight. Health education is therefore geared towards cancer prevention. This is receiving the opposite major attention (Hong et al., 2006; Opara and Jiburum, 2010; Lund and Graigher, 2002).

However, another point of interest is the histological differentiation of the resultant growths themselves. Hitherto, squamous cell carcinoma had been mostly in focus. Thus, a histological review of 86 albino biopsy specimens in Tanzania showed squamous cell carcinoma to be more common than basal cell carcinoma (Kiprono et al., 2014).

Surgical treatment is in vogue. It may require to be carried out more than once. Asuquo et al. (2009) reported tumors being excised with a recurrence in a man who also had adjuvant therapy with poor response. In a Malawian case, the “treatment dilemma” was owing to “multiple surgical excisions for squamous cell carcinomatous lesions” (Mapurisa and Masamba, 2010). Therefore, this study present a patient in whom six excisions of this particular carcinoma was followed by a sarcoma.

MATERIALS AND METHODS

This series consists of cases of albinos whose specimens were studied in a Regional Orthopaedic and Plastic Surgery Center between 1974 and 2014. Only one individual met the rare qualification of having had multiple biopsies of the rather common squamous cell carcinoma while the seventh surgery was for sarcoma.
Figure 1. The lesion showed mitotically active, strap-like pleomorphic cells indicative of sarcomatous change of the rhabdomyosarcoma type. A=> points to odd mitotic figure; B=> points to plump pleomorphic variably elongated cells.

CASE PRESENTATION

An albino was presented to the Regional Orthopaedic and Plastic Surgery Center in October, 1975, at the age of 27 years. His face, chest and neck were involved. All histopathologic sections were diagnosed by Wilson I. B. Onuigbo as squamous cell carcinoma. Over the years, the other presentations of this particular carcinoma were as follows: November, 1976 (lower lip); May, 1981 (forehead and neck); April, 1983 (neck); March, 1995 (cheek); and October, 1995 (periauricular region).

The last appearance was in March, 2010, when he presented to the other surgeon (Richard E. Nnabuko) at 61 years of age. This time, the forearm was the part involved. This lesion was biopsied.

GROSS AND MICROSCOPIC FINDINGS

At the histopathology laboratory, the tissue which was preserved in 10% formolsaline consisted of a 3 × 2 cm albino skin ellipse with a shallow ulcer centrally. Histology showed, deep to the ordinarily inflamed ulcer, a very pleomorphic growth with numerous tumor giant cells as well as occasional cross striations (Figure 1). The resection margin was free of tumor cells. A diagnosis of rhabdomyosarcoma was made.

DISCUSSION

The albino is known to suffer frequently from sun-induced squamous cell carcinoma (MacSween and Whaley, 1992), a rare case in which squamous cell carcinoma occurred in one facial focus with both basal cell carcinoma and adenocystic carcinoma have been published previously (Onuigbo and Nnabuko, 2009). Here, a peculiar case with multiple carcinomas which began with recurrences and then ended as a sarcoma have been reported. We are not aware of such an outcome being reported in the literature.

Interest in the development of skin cancer in albinos in Nigeria was kindled by a dermatologist who undertook the survey of the whole country (Okoro, 1975). Recent reports have appeared from this country, namely, Yakubu and Mabogunje (1993), Opara and Jiburum (2010), and Asuquo et al. (2010).

There is a common problem in cancer cases in developing countries. Patients are often lost to follow-up, e.g., the Tanzanian report by Mabula et al. (2012) and Nigerian by Opara and Jiburum (2010). Hence, our patient exhibited perseverance of a notable order. The present paper has added a rarity, namely, rhabdomyosarcoma of the pleomorphic type. Incidentally, the rarity of rhabdomyosarcoma itself is shown by the case published recently (Manasseh et al., 2009). Our case
featured a sarcoma that has followed a series of carcinomas.

Therefore, what of the concurred carcinoma and sarcoma? Aptly, named as carcinosarcoma, the combinations are worthy of citations. Actually, internet search revealed other examples, namely, congenital case (Ahmed et al., 1999), uterine corpus (Garrett et al., 2012), sinonasal involvement (Erkul et al., 2012), childhood (Roma et al., 2012), and cell death pathways as therapeutic targets (Fulda, 2012).

Conclusion

Sunlight is accepted as the preventable cause of cancer in albinos. Usually, concerning the squamous cell carcinoma type, a rare case has been presented in which 6 recurrences of this type from age 27 to 61 years culminated in the de novo development of rhabdomyosarcoma. This characteristic presentation is noteworthy since it followed on healed carcinomas rather than concurred with any of them. This case illustrates the use of Macartney et al. (1980) article concerning the employment of histopathology data pool in epidemiological analysis in the UK. Conclusively, the Nigerian case is worthy of publication in an international journal.

Conflict of Interests

The author(s) have not declared any conflict of interests.

REFERENCES
