INEVITABLE CAESAREAN MYOMECTOMY: REPORT OF TWO CASES

Okeji N.A.E.¹, Eli S.², Abam D.S.², Nnaka M.P.¹.

- 1. Department Of Obstetrics And Gynaecology Military Hospital, Port Harcourt, Rivers State, Nigeria
- 2. University Of Port Harcourt Teaching Hospital, Port Harcourt, Rivers State, Nigeria

CORRESPONDENCE:

E-mail:nokeji@yahoo.com

ABSTRACT:

BACKGROUND:

Caesarean myomectomy is contraindicated during caesarean section unless there are inevitable indications such as severe haemorrhage, inability to access the lower uterine segment or any other justifiable reason. This procedure may be associated with maternal mortality if not properly handled.

AIM:

These case reports highlight such occasions when it may be necessary to perform myomectomy during caesarean section.

CASE REPORTS:

Mrs. NN and Mrs. MN, both 32year old booked multigravidae at 39 weeks gestation had caesarean myomectomy with good fetomaternal outcomes. They registered for ante-natal care at gestational ages of 26 and 28 weeks respectively. Obstetric sonogram done at 37 weeks of gestation revealed live fetuses with abnormal lie and presentation. Estimated fetal weights were 3.2 and 3.5 kilograms, anteriofundal placentae and uterine leiomyoma masses at the lower uterine segments measuring 14 by 12 centimetres and 18 by 14 centimetres. They inevitably had caesarean myomectomy with good feto-maternal outcomes. Estimated blood losses were 600 and 700 milliliters respectively. The post-operative periods were uneventful. They were discharged home on the 7th post-operative day and seen in post-natal clinic in stable clinical state.

CONCLUSION:

Caesarean myomectomy is not commonly carried out, except for inevitable reasons such as leiomyoma occupying the lower uterine segment as seen in these patients.

Keyword: caesarean myomectomy, leiomyoma, lower uterine segment.

INTRODUCTION

Caesarean myomectomy which implies carrying out myomectomy during the course of caesarean section is usually contraindicated except for inevitable reasons¹. Myomectomy carried out during caesarean section may be complicated by haemorrhage due to increased vascularity of the uterus in pregnancy^{1,2}.

These case reports reveal such occasions when it is reasonably safe to perform myomectomy during caesarean section. Caesarean myomectomy was performed in order to gain access to the lower uterine segment to allow delivery of the babies during elective caesarean sections.

CASE REPORTS

The patients were Mrs. N. N. 32 years old and Mrs. M. N. also 32 year old booked multigravidae both at 39 weeks gestation. They booked for antenatal care at gestational ages of 26 and 28 weeks respectively. Obstetric sonograms done at booking confirmed uterine fibroids coexisting with intrauterine singleton pregnancies. The uterine leiomyoma measured 14 by 12 centimetres and 16 by 14 centimetres respectively.

Their antenatal periods remained uneventful until

37 weeks of gestation when the fetuses were found to be in abnormal lie and presentation. They were offered elective caesarean section at 38weeks and consented to surgery at 39 weeks of gestation. Their packed cell volume was 33% and 35% respectively prior to the surgeries and 2 units of blood were screened, grouped and cross matched for each patient.

At caesarean section live male and female babies in transverse lie and frank breech presentations were delivered respectively. Both babies had APGAR scores of 8 at the first minute and 10 at the fifth minute.

Prior to the delivery of the babies, a huge intramural fibroid nodule and a huge submucous fibroid nodule occluding the lower uterine segments with dimensions of 14 by 12 centimetres and 18 by 14 centimetres respectively, were removed. Bleeding was controlled by high dose oxytocin infusion and application of sutures.

The cavities left after removal of the fibroids were closed in layers alongside closure of the transverse incision on the lower uterine segment used to deliver the baby. Extra sutures were needed to completely obliterate the cavities and secure haemostasis. The estimated blood losses were 600 and 700 millilitres respectively. Oxytocin infusion was continued for 24 hours with misoprostol inserted rectally at the end of the surgery. They were placed on nothing by mouth till review, prophylactic intravenous ceftriaxone 1g daily, metronidazole 500mg 8 hourly for 48 hours and parenteral analgesia for 24 hours. Their post-operative packed cell volumes were 28 and 29% respectively. Their post-operative periods were uneventful and they were discharged home on the seventh postoperative day.

FIGURE 1



An example of uterine tourniquet use (improvising with a Foley catheter) at abdominal myomectomy.

FIGURE 2



A huge submucous uterine leiomyoma in the lower uterine segment removed at caesarean section.

DISCUSSION

Caesarean myomectomy is usually contraindicated during caesarean section unless there are inevitable indications such as severe haemorrhage, inability to access the lower uterine segment or any other justifiable reason^{1,2,3}.

These cases reveal the fact that caesarean myomectomy could be performed when it is inevitable such as uterine fibroids occluding the lower uterine segments as in our patients. In these patients, the use of high dose oxytocin and meticulous closure of the layers of the cavity created by the removal of the fibroids helped control haemorrhage during and after the surgery^{3,4}.

Caesarean myomectomy does carry lots of concerns and challenges to both the obstetrician and the patient. Patients and their relatives often request for removal of fibroids at caesarean section without fully understanding the challenges and so need to be informed of the intricate nature and bearing in mind the demerits of incidental surgeries.

Concerns at surgery would include surgical and anaesthetic risks because of the additional times required for both¹. There is the possibility of significant increased blood loss and exposure to more anaesthetic agents/ increased doses. At surgery, decisions on incisions to make on the uterus have to be made including the possibility of a classical incision if access to the lower uterine segment is obscured or difficult as a result of the fibroid nodules. Another dilemma would be whether or not to remove all the fibroid nodules of reasonable size or only those in close proximity to the uterine incision made to deliver the baby. A skilled surgeon is required to operate because of the challenges of haemorrhage and difficulties with uterine closure/repair may necessitate a hysterectomy.

One clear advantage of caesarean myomectomy is the reduced risk of spread of possible malignant cells most especially in this era of laparoscopic myomectomy and the controversy surrounding power morcellation because of the increased risk of dissemination of cancer cells in cases of unsuspected leiomyosarcoma⁵.

A gynaecologist/obstetrician may carry out caesarean myomectomy in the presence of a subserous leiomyoma, most especially sessile or pedunculated subserous leiomyomas, where there may be partial avulsion of the fibroid during the course of the caesarean section. If partially avulsed fibroids are noted they should be removed because loss of blood supply to these fibroids could lead to necrosis, leading to infection and poor wound healing, thereby necessitating repeat surgeries with the attendant increase in morbidity, and possibly mortality, when such decisions are delayed as a result of prolonged conservative approaches to management.

Alleviation of pre-pregnancy symptoms attributable to the leiomyoma may also be achieved by caesarean myomectomy, knowing fully well that modulation of symptoms may also occur spontaneously after childbirth in patients with leiomyomas⁴⁻⁶.

Consideration has to be made with respect to the mode of delivery in subsequent pregnancies, most especially in the event of caesarean myomectomy whereby multiple uterine incisions are made, including that made in the lower uterine segment to deliver the baby, because of the relative increased risk of uterine rupture, be it antepartum or intrapartum rupture⁴. There is the need to properly counsel the patient after the procedure, with the advice for possible elective caesarean section in subsequent pregnancies, bearing in mind other obstetric indications for caesarean section as well those for vaginal birth after caesarean section.

In the event of caesarean myomectomy during emergency caesarean section, especially when there is infection (chorioamnionitis), there is the increased possibility of abdomino-pelvic abscesses, which may lead to rare complications like uterocutaneous fistulae with medium to long term symptoms of cyclical bleeding from the skin during menstruation after lactational amenorrhoea has ended^{8,9}. This would most likely require repeat surgery for treatment, and may necessitate a hysterectomy if conservative options like use of gonadotropin releasing hormone agonists and fistulectomy prove abortive.

Lastly, the long term complications of caesarean myomectomy include the complications of caesarean section and those of abdominal myomectomy. These may include fertility concerns from tubal and uterine factors like tubal blockage and intrauterine adhesions⁹. There is also the dangerous complication of possible morbid adherence of the placenta in a subsequent pregnancy.

CONCLUSION

This report does not advocate for routine caesarean myomectomy during caesarean section for women with uterine fibroids. The obstetrician however should embark on such a procedure with caution where there are optimal anaesthesic facilities, sufficient blood bank service and large doses of oxytocics available. The use of uterine tourniquet may be valuable to reduce uterine blood loss and an experienced surgeon should operate.

REFERENCES

- 1. Ehigiaba A. Caesarean myomectomy: New Frontier in Surgical Practice. *African Journal of Reproductive Health* 2003; 7(1): 1118–4843.
- 2. Ojule J, Ocheche US, Green K. Inevitable caesarean myomectomy: a case report *Nigerian Hospital Practice* 2010: 6 (3). DOI: 10. 4314/Obp v61362340
- 3. Umezurike C, Akwuruoha E. Eguzo K. A Cohort Study of Maternal and Fetal Outcome for Myomectomy at caesarean

- Section in Abia, South Eastern Nigeria. International Journal of Reproduction, Contraception, Obstetrics and Gynaecology. 2014; 3(4): 936.
- 4. Omigbodun A. O., Fawole A. O. Myomectomy during pregnancy and delivery, is it Safe? Commentary Tropical Journal of Obstetrics and Gynaecology 2005: 22(1):1-3.
- 5. UPDATED Laparoscopic Uterine Power Morcellation in Hysterectomy and Myomectomy: FDA Safety Communication.Date Issued: Nov. 24, 2014.
- Agboghoroma C. O, Efetie E. R., Umezulike
 A. C. Unavoidable caesarean myomectomy:
 A Case Report, Tropical Journal of Obstetrics and Gynaecology 2005: 22 (1): 81 82.
- 7. Nwagha U. I., Agu K. A, Nwankwo T. O. Emergency myomectomy during pregnancy: A case report, *Tropical Journal of Obstetrics and Gynaecology* 2005; 22 (1): 79 80.
- 8. Loue V, Koffi A, Adjoby R, N'Guessan K, Alla C, Gbary E, Abauleth R. Post Myomectomy Uterocutaneous Fistula. Journal of Gynaecologic Surgery 2013;29(1): 36 – 38 DOI: 10.1089/gyn20120098.
- 9. Lim PS, Shafiee MN, Ahmad S, Hashim Omar M. Uterocutaneous fistula after caesarean section secondary to red degeneration of intramural fibroid. *Sexual Reproductive Health C.* 2012; 3(2): 95–6. DOI: 10.106/j.srhc.2012.03.002. Epud 2012 Mar. 17.