Unavoidable Caesarean Myomectomy: A Case Report

Chris. O. Agboghoroma, Efena R. Efetie and Augustine C. Umezulike
Department of Obstetrics and Gynaecology, National Hospital, Abuja, P.M.B 425, Garki, Abuja, Nigeria.

Abstract

The standard practice is to avoid myomectomy during caesarean section. We present a case of myomectomy performed during caesarean section in a 32 year old primiparous woman. Uterine fibroid was diagnosed at 25 weeks gestation at the antenatal booking clinic. Patient was however symptom free throughout pregnancy. Elective caesarean section was undertaken at 38 weeks gestation on account of breech presentation and major placenta praevia. After delivery of the baby and placenta, the fibroid mass made uterine wound closure impossible, necessitating myomectomy. High dose oxytocin infusion was used to control intra-operative and post-operative haemorrhage. Outcome for mother and baby were satisfactory. Caesarean myomectomy can be safely undertaken in experienced hands whilst applying measures to reduce intra-operative and post-operative blood loss.

Key Words: Uterine fibroid, Caesarean myomectomy, haemorrhage. [Trop J Obstet Gynaecol, 2005, 22: 81-82]

Introduction

Uterine Fibroids are the commonest tumour of the female genital tract, commoner amongst the Negroid race, compared to the Caucasians[1]. Obstetricians working in Africa are therefore confronted frequently with situations of coexisting uterine fibroids with pregnancy. While conservative management is prescribed during pregnancy, surgical management at the time of caesarean section has remained controversial. The standard practice has thus been to perform caesarean section followed by interval myomectomy. The presence of fibroid in the lower uterine segment may be an indication for classical caesarean section. Caesarean hysterectomy may be undertaken in extreme situations and in women who have completed their families. On the other hand, caesarean myomectomy has not been popular on account of its potential for uncontrollable haemorrhage due to increased uterine vascularity in pregnancy[2, 3]. However, recent reports indicate that caesarean myomectomy can be safely undertaken by skilled practitioners and with application of tourniquet at the base of the broad ligament or infusion of high dose oxytocin to control haemorrhage[4-7]. A case is presented of an unavoidable myomectomy performed during caesarean section for breech presentation and placenta praevia.

Case Report

Mrs A.L. is a 32 year old gravida 3 Para 0^{+2}. She booked for antenatal care at the National Hospital Abuja at 25 weeks gestation. At booking, she had no complaints and her general condition was satisfactory. The booking ultrasound scan revealed an active appropriate for date foetus in transverse lie. The amniotic fluid was adequate and the placenta anterior extending into the lower uterine segment and reaching the internal cervical os. There was a fibroid mass measuring 14 x 11.9cm in the lower uterine segment. She attended clinic regularly. At 30 weeks gestation, mild pregnancy-induced hypertension was diagnosed for which she was managed with anxiolytics and rest. A repeat ultrasound scan done at 33weeks gestation revealed a viable fetus in longitudinal lie, cephalic presentation and adequate liquor volume. The placenta was anterior and low-lying, with the lower edge extending to the internal cervical os. The lower segment fibroid mass was now measuring 15.3 x 11.9cm. At 34 weeks gestation, the presentation was noted to be breech and persisted till the last antenatal visit at 37 weeks. External cephalic version was not undertaken due to the placenta praevia. She was counselled for elective Caesarean section at 38 weeks gestation, which she consented to. Pre-operative haemoglobin was 10.4g/dl. Two units of grouped, cross matched and screened (HIV and Hepatitis B & C negative) blood were reserved for surgery.

A lower segment caesarean section was undertaken. A live female baby (complete breech) was delivered. The baby weighed 3.05kg and the Apgar scores were 6 in the first minute, 8 in the fifth minute and 10 in the tenth minute. A major placenta praevia was confirmed. An intramural fibroid mass measuring 15 x 15cm was located in the lower antero-lateral portion of the uterus protruding into the uterine incision, making closure impossible. Profuse bleeding was observed through the wound site and the placenta bed. High-dose intravenous oxytocin infusion (60i.u. in 500ml 5% dextrose in water) was set up to ensure uterine contraction. The fibroid nodule was enucleated and cavity closed. The

Correspondence: *Dr. Chris. O. Agboghoroma*
Department of Obstetrics and Gynaecology, National Hospital, Abuja, P.M.B 425, Garki, Abuja, Nigeria.
E-mail: *agboschris@yahoo.com*

caesarean section wound was thereafter closed in two layers. Estimated blood loss was 2 litres. Two units of whole blood were transfused intra-operatively and oxytocin infusion continued for 24 hours post partum. She was placed on prophylactic antibiotics ampicillin and metronidazole for 5 days.

The post-operative period was uneventful. The blood loss was minimal. The 2nd post-operative day haemoglobin concentration was 6.6g/dl while the packed cell volume was 20%. She remained asymptomatic, haemodynamically stable, and declined further blood transfusion. The anaemia was managed with oral ferrous sulphate tablets 200mg twice daily in combination with folic acid 1mg daily. By the 7th post-operative day, her wound union was satisfactory and she was discharged home in good condition with a 2 weeks clinic appointment. Repeat haemoglobin concentration after two weeks was 9.7g/dl while the packed cell volume was 29%. She was requested to continue the haematinics while a further 4 weeks postnatal clinic appointment was given. At the subsequent visit she had no complaints. The general physical examination was unremarkable, while abdominal and pelvic examinations confirmed complete uterine involution. Following family planning counselling she was offered injectable contraception (depot-medroxy-progesterone acetate).

Discussion

Although it is generally stated that myomectomy should be avoided during caesarean section, under certain conditions caesarean myomectomy becomes unavoidable[3]. This case illustrates a situation where the alternative to caesarean myomectomy would have been a caesarean hysterectomy. This would have been catastrophic for a young woman having her first delivery. The traditional African society places high premium on child bearing and the desired family size is above six[8]. Even when further child bearing is not desired, our women prefer to preserve their uterus for menstrual functions. Efforts should therefore be made to avoid hysterectomy especially amongst young women in our society.

The main risk at caesarean myomectomy is excessive haemorrhage due to increased blood supply to the uterus in pregnancy. However, recent reports[5] show that blood loss at caesarean myomectomy can be controlled with high dose oxytocin infusion as was employed in this case. The blood loss recorded in this case was essentially from the placenta bed and as a result of delay in closure of the caesarean section wound due to interference of the fibroid mass. Indeed, blood loss from the myomectomy site was minimal. Furthermore, the control of blood loss during caesarean myomectomy using foleys catheter tourniquet tied round to encompass and compress both uterine arteries at the base of the broad ligament and the vessels in the infundibulo-pelvic ligament have been reported[6]. Kwawukume[4] working in Ghana compared the efficacy and safety of myomectomy done at Caesarean section with the application of a tourniquet, to Caesarean section without myomectomy. He concluded that there was no significant difference in intra-operative and post-operative morbidity, and blood loss between the two groups. It is of interest to note that none of the documented cases of caesarean myomectomy undertaken utilising these measures were associated with intra-partum or post-partum haemorrhage leading to severe morbidity or mortality. With regards to surgical techniques for minimising blood loss, we tend to agree with Ehigiegba et al[5] that the use of the tourniquet may be more cumbersome and traumatic to a recently pregnant uterus compared to oxytocin infusion. More studies are however, required to determine the most effective and safest means of undertaking caesarean myomectomy when indicated.

Overall, the advantages of caesarean myomectomy in avoiding repeat anaesthesia and laparotomy, and freedom from other associated problems of fibroid (including anaemia, dysmenorrhoea, degenerative changes and complications during subsequent pregnancies) cannot be overemphasised. It is believed that with appropriate surgical skills and application of either or both techniques in the control of blood loss, caesarean myomectomy can be safely offered to patients.

References

1. Briggs ND. Common Gynaecological tumours. *Trop J Obstet Gynaecol*, 1995; 12(1): 63-64.
2. Ogedengbe OK. Uterine Fibroids. In: Okonofua F, Odunsi K (eds), *Contemporary Obstetrics and Gynaecology for Developing Countries*. Women's Health and Action Research Centre, Benin, 2003: 202-213.
3. Lowe DG. Benign tumours of the uterus. In: Edmonds DK (ed), *Dewhurst's textbook of Obstetrics and Gynaecology for postgraduates*, 6th edition. Blackwell Science, London. 1999: 552-559.
4. Kwawukume EY. Caesarean Myomectomy. *Afr J Reprod Health* 2002; 6(3): 38-43.
5. Ehigiegba AE, Ande AB, Ojobo SI. Myomectomy during Caesarean section. *Int J Gynecol Obstet*, 2001; 75: 21-25.
6. Ezechi OC, Kalu BKE, Okeke PE, Nwokoro CO Inevitable Caesarean Myomectomy: a Case Report. *Trop J Obstet Gynaecol*, 2003; 20(2): 159-160
7. Omar SZ, Sivanesaratnam V, Damodaran P. Large lower segment myoma: myomectomy at lower segment caesarean section-a report of two cases. *Singapore Med J*, 1990; 40: 109-110.
8. National Population Commission (NPC) [Nigeria] and ORC Macro. *Nigeria Demographic and Health Survey 2003*. Calverton, Maryland: National Population Commission and ORC macro, 2004.