Inevitable Caesarean Myomectomy

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Summary

The standard teaching is to avoid caesarean myomectomy as much as possible for the fear of the attendant severe haemorrhage. Classical caesarean section in spite of its risk of uterine rupture in subsequent pregnancies had been prescribed in its place. We report a case of a 32 year old nullipara who had an inevitable removal of a huge intramural fibroid in order to assess the baby. A high dose oxytocin infusion, and skillful surgery ensured minimal intra operative and post operative blood loss.

Key words*: caesarean myomectomy, inevitable, fibroids*

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Introduction

Traditionally, performing myomectomy during pregnancy and at caesarean sections is discouraged because of the fear of haemorrhage as a result of the increased vascularity of the pregnant uterus. Yet uterine fibroids primarily affect women within the reproductive age.

Since these benign tumours of the uterine smooth muscle are very common among our women[1], it is to be expected that many obstetricians practicing in Africa will be confronted with the challenge of managing fibroids co-existing with pregnancy. For long, the standard practice has been to leave such fibroids even in the lower uterine segment for the risk of haemorrhage in preference for classical caesarean section. The application of tourniquet at the base of the broad ligament[2] and high dose oxytocin infusion[3] are techniques recently described to reduce blood loss.

Classical caesarean section which some obstetricians would prefer has a four times risk of uterine rupture over the lower segment and compromises the chances of vaginal birth after caesarean section[4]. However within the last decade, there have been series of reports documenting successful caesarean myomectomy [2,3,5,6]. Some reports have also documented successful myomectomy performed during pregnancy[7,8] . We hereby report a case of successful caesarean myomectomy managed at the Nnamdi Azikiwe University Teaching Hospital, Nnewi, Nigeria.

Case Report

Mrs O.M was a 32 year old nullipara who was referred to our antenatal clinic at a gestational age of 22 weeks from a peripheral health facility on account of pregnancy co-existing with uterine fibroids. She had an ultrasound report that showed multiple uterine fibroids including a huge lower segment intramural fibroid. She was managed successfully in the peripheral hospital for red degeneration a week prior to presentation. She had nine years history of primary infertility.

At presentation, she was afebrile, not pale, and anicteric. The blood pressure was 120/80mmHg and the pulse rate was 88beats/minute. The symphysiofundal height was 32 cm and multiple firm round masses were palpable per abdomen. The liver and spleen were not palpable and the kidneys were not ballotable. The fetal heart rate was strong and regular.
An impression of uterine fibroids co-existing with pregnancy was made. A repeat ultrasound confirmed the earlier ultrasound report. She had two episodes of acute abdomen as a result of red degeneration in pregnancy at 28 and 33 weeks of gestation. At each occasion she was admitted and managed conservatively with analgesics and intravenous fluids.

She was booked for an elective ceasarean section at 38 weeks gestation as a result of persistent breech presentation, nine years of infertility and the lower segment fibroids. The patient was adequately counseled and she gave an informed consent for ceasarean section. The preoperative haemoglobin was 12.8g/dl and urinalysis was normal. Two units of blood negative to HIV 1 & 11, Hepatitis B & C were grouped and crossmatched. General anaesthesia was administered. Halothane was not used. A sub umbilical midline incision was used to access the peritoneal cavity. Intraoperative findings showed two large subserosal fibroids 14 by18cm and 24 by 22cm, and a

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big intramural fibroids at the lower segment 10cm in diameter. The fibroids weighed 5.8 kilogrammes . After reflecting the uterovesical peritoneum, access to the baby was secured by enucleating the huge lower segment fibroid. The incision was deepened to deliver a male baby that weighed 2.8 kg. The Apgar scores were 8 and 10 in one and five minutes respectively. Intravenous five hundred micrograms of ergometrine was administered. The placenta and fetal membranes were manually removed. 30 iu of oxytocin was added into the little remaining intravenous infusion of normal saline. 60 iu of oxytocin in 500ml of normal saline was subsequently used. The uterine incision together with the myoma bed was closed in layers. The two fundal subserosal fibroid masses which were the sites of the red degeneration were then enucleated and their shallow cavities closed. The high dose oxytocin infusion was continued for twelve hours post operatively. The estimated blood loss was 900 ml and the patient was not transfused.

She had an uneventful post operative course and was discharged on the 7th postoperative day after the sutures had been removed. At six weeks postpartum visit, she was found healthy and breastfeeding her baby. The baby was also well and weighed 3.5kg. On histology, sections of the masses showed a benign mesenchymal neoplasm composed of proliferating mature smooth muscle cells disposed in interlacing fascicles. Features were consistent with that of leiomyoma uteri.

Discussion

The traditional teaching is to avoid myomectomy during pregnancy or caesarean section except for symptomatic pedunculated fibroids. The fear is for uncontrollable intraoperative and postoperative haemorrhage that may lead to hysterectomy, increased morbidity and mortality. This causes a lot of anxiety and trepidation to Obstetricians about to perform caesarean section in the presence of uterine fibroids. Though the lower segment incision is the technique of choice for caesarean section, a classical caesarean section has been prescribed in order to avoid enucleation of fibroids in the lower uterine segment[1].

Several techniques have been currently advocated to minimize intraoperative blood loss during caesarean myomectomy. Kwawukume[2] described the application of tourniquet around the base of the broad ligament to compress both uterine arteries and vessels at the infundibulopelvic ligament. Some authors have reported the successful use of high dose oxytocin infusion[3,6] which is maintained for several hours post surgery. Another method is bilateral ligation of the ascending uterine artery[9]. In a prospective randomized study of 52 patients to compare the efficacy of bilateral ligation of the ascending uterine artery with the tourniquet, Sapmaz et al[9] found no difference in total intraoperative blood loss and operation time between the two methods. Also, Kwawukume [2] reported no significant difference in blood loss at caesarean section and caesarean myomectomy done with tourniquet. Uterine involution was also normal and there was no significant difference in intraoperative and postoperative morbidity. The blood loss in this case is similar to that of normal caesarean section due to the high dose oxytocin used to ensure firm uterine contraction and skillful surgery.

The benefits of caesarean myomectomy to the patient are numerous. It obviates the need for myomectomy in the future and the complications associated with fibroids in the subsequent pregnancies[2]. The two large sudserosal fibroids in this case were removed because they were the sites of red degeneration and pain in during the pregnancy. Caesarean myomectomy also relieves the patient of the clinical problems associated with fibroid such as menorrhagia, dysmenorrhea and dyspareunia. When located in the lower uterine segment, lower segment caesarean section with myomectomy allows for vaginal delivery in subsequent pregnancies. [10] The myomectomy scar following caesarean myomectomy has been shown to have better properties than that of myomectomy outside pregnancy[11]. It is also a cost effective intervention, particularly in resource constrained settings.

Our women have a strong aversion to operative deliveries and those with uterine scars often attempt vaginal delivery even at great risk to their lives[12]. Also a large family size is preferred in our environment[13] and a classical caesarean section would compromise subsequent pregnancies. We thus advocate caesarean myomectomy for lower segment fibroids in place of classical caesarean section in low parity women in Nigeria.

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