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Case Report

Caesarean section presenting an opportunity for myomectomy: a case report

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ABSTRACT

Obstetricians, all over the world, frowned at the performance of myomectomy during pregnancy due to haemorrhage associated with such a procedure. This haemorrhage is even more severe in a gravid uterus undergoing caesarean section, making obstetric surgeons to avoid this risky adventure of performing the two surgeries (Caesarean section and myomectomy) at the same time. Sometimes, the fibroids are located in different parts of the uterus and they can be subserous/ pedunculated, intramural or submucous. The pedunculated fibroid has long stalk that may be thin making it very easy to "pluck" by suture ligating it. Again, uterine fibroid may be located in the lower uterine segment and bump into the incision line during cutting (uterine incision) to create access to the fetus. Caesarean sections done for different indications can therefore present an opportunity for obstetricians to remove these myomas in a harmless way that defiles the old obstetric dictum of "never a myomectomy during caesarean section". The case in this report had caesarean section on account of severe preeclampsia with oligohydramnos but chance favoured the performance of unsolicited caesarean myomectomy safely for her.

Keywords: Caesarean section, Uterine fibroids, Unsolicited caesarean myomectomy, Plucking myomectomy, Case report

INTRODUCTION

Uterine fibroids are common benign tumours of the uterus with varying degree of presentations ranging from being asymptomatic to symptomatic.[1] Uterine fibroids are common, multiple and, of larger sizes in black women with incidence by age 50 years being 80% and in the white women, at same age, the incidence is 70%.[2,3] Fibroids are rare before puberty but commonly seen during the reproductive years.[4] Pregnancy can sometimes co-exist with uterine fibroids with diverse complications during antenatal period, labour and puerperium.[5] The true incidence of pregnancy co-existing with fibroids is not known but prevalence of 2-4% has been reported by Klastsky et al.[6] Caesarean section is an obstetric surgical procedure that involves making abdominal and uterine incisions to deliver the fetus, placenta and membranes after the age of viability.[7] It has been said by World Health Organization that caesarean section should be offered to women in need of it when it is medically indicated to safe the mother and the fetus.[8] Recently, the rate of caesarean section is increasing globally, presenting great opportunity for obstetricians to encounter uterine fibroids more

frequently than ever.[9] During laparotomy or caesarean sections, gynaecologist and obstetricians have tactically removed uterine myomas in some careful approaches that are still safe for the patients including the use of tourniquet, bilateral ligation of uterine arteries immediately after delivery of the fetus, ligating the stalk of pedunculated fibroid and inclusion of myoma dead space in the closure of uterine incision during caesarean section.[10,11] The fear of severe haemorrhage during caesarean myomectomy makes obstetricians to reschedule fibroid removal to another surgical setting usually outside the puerperium.[12] If the location, size or number of the fibroids do not permit safe removal, the dictum (the traditional thumb rule) of never a caesarean myomectomy should still stand tall and the myomectomy should be done later usually before the next pregnancy.[12,13] The patient in this report has two pedunculated fibroid masses that were removed without additional blood loss or complication related to the caesarean myomectomy done for her.

CASE REPORT

A 34-year-old Gravida 2 para 1 presented to a private hospital with the clinical diagnosis of severe preeclampsia and oligohydramnos at gestational age of 38 weeks with coexisting uterine fibroids. Vaginal examination findings revealed unfavourable cervix for induction of labour. The decision to performed emergency caesarean section for her was reached after consultation with the anaesthetist.

Surgical management

The anterior abdominal wall was surgically entered via Pfannenstiel incision while the uterus was entered via the transverse lower uterine segment incision. The neonate was delivered safely with average birth weight and good Apgar scores. The placenta and the fetal membranes were completely removed. The initial intravenous oxytocin 10units bolus was sustained with oxytocin infusion 30 units in 500ml of intravenous fluid as the vehicle of drug delivery. The uterus was exteriorized making the fibroid masses to be visible in their entirety (Figures 1 and 2). The uterine incision was repaired in two layers using vicryl number 2 sutures.

Haemostasis was secured. The two fibroids, both pedunculated, were identified and decision was taken to remove them in view of their sizes, location and stalks. The first fibroid (the bigger one in Figure 1) was removed by running a vicryl number 2 suture through the stalk and ligated it. A circumferential incision was made on the serosa covering the fibroid, about 2cm above the ligature, thus making plucking the whole fibroid mass very easy without loss of significant blood. The ligature was reinforced to ensure good haemostasis. The same procedure was repeated for the second fibroid (smaller one in Figure 2). There was no additional complication from the caesarean myomectomy done except extra 5-8 minutes. The uterus was observed for any bleeding and there was none from the sites of myomectomy. The uterus was well contracted. Postoperative care was carried out according to the hospital standard protocol. There was no additional complication and postoperative period was not remarkable. Her packed cell volume was optimal and she was clinically stable. Patient and baby were discharged home on postoperative day 3 after ensuring that the baby was sucking well, lactation fully established and mother was tolerating oral medications which were continued for 7 days. She was seen at the postnatal clinic and report of histological evaluation confirmed uterine leiomyomas for the specimens. Patient was subsequently counselled on the need to have specialist care in her next pregnancy if the family size needs to be increased. The caesarean section offered her the unique opportunity for the myomectomy to be performed without incurring additional cost of anaesthesia, hospital bed, antibiotics and analgesia.

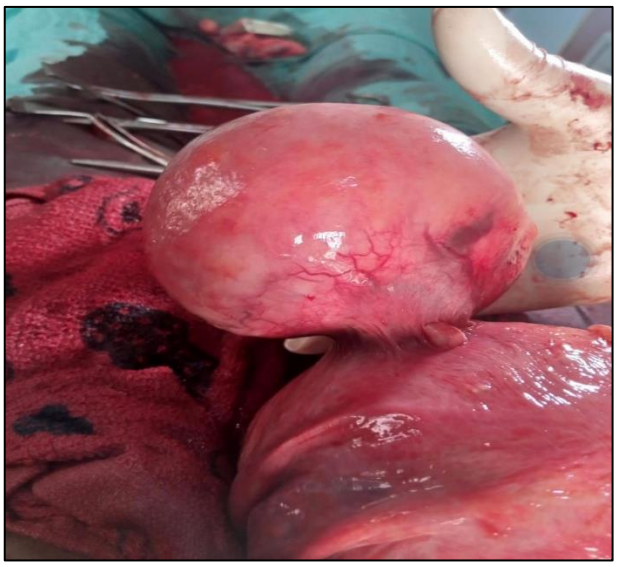

Figure 1: Bigger uterine fibroid.

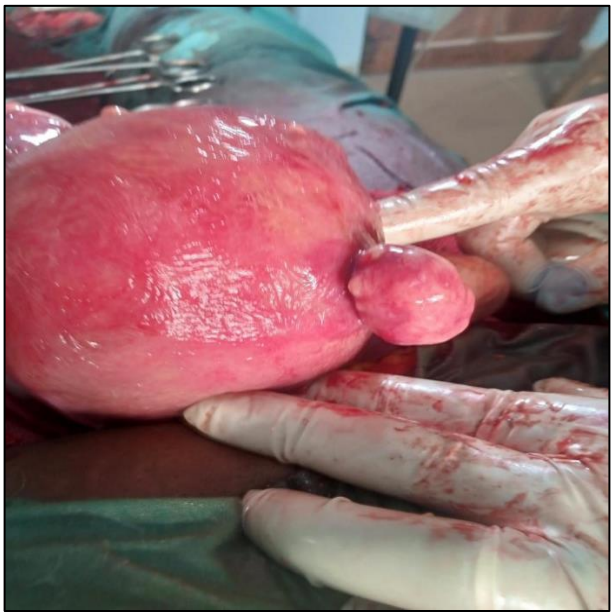

Figure 2: Smaller uterine fibroid.

DISCUSSION

Globally, the trend in caesarean section is on the raise with rate of 30% being performed in the western countries and rate of 35.5% being reported in the South-Western Nigeria.[14,15] In view of this upward increase in the caesarean section rate, obstetricians should be prepared to encounter pelvic pathologies that are common during the reproductive years and one of this is uterine myoma.[4] Obstetricians have been avoiding removal of fibroids during caesarean surgery due to possibility of severe haemorrhage that may occur in such situation. In recent years, there have been reports of surgeons performing caesarean myomectomy with great success and no added complications.[10,11]

Our case has caesarean section on account of severe preeclampsia complicated by oligohydramnos at term. Intraoperatively, myomas were identified and decision was to remove them in view of their pedunculated nature. The fibroids were removed with no additional cost and complications such as prolonged hospital stay, severe haemorrhage or surgical site infection. This is similar to findings by other researchers that reported no complications attributable to myomectomy during caesarean section.[12,13]

To achieve successful caesarean myomectomy, the obstetricians should be experienced enough to carefully select the patients. Heroic attributes should not be the incentives in the performance of myomectomy during caesarean sections. The motivating factors to do this surgery, should be to make use of the opportunity the caesarean surgery offers, to avoid performing myomectomy in a second setting when the fibroid is amenable to easy removal without posing dangers to the patients.[12] The case herein had uterine fibroids (masses) that were removed by tying the stalks with sutures and dissected the fibroids above the knots. The myomas were shelled out or plucked and this was followed by reinforcing the stalks extra surgical suture to secure haemostasis. The approach was harmless and resulted in no additional intraoperative or postoperative complications. Similarly, some studies have reported removing myomas by ligating the uterine arteries bilaterally and by using tourniquet after the delivery of the fetus.[10-12] The histological evaluation confirmed the masses were leiomyomas.

This case was reported to further support caesarean myomectomy only in selected group of patients with co-existing fibroids in pregnancy and in whom caesarean section offers the unique opportunity for their (fibroids) removal.

CONCLUSION

Performing myomectomy during caesarean section that is once considered a dangerous surgical excess is now being reconsidered as a decision to be taken by experienced obstetricians who should base their decision on many factors. The most important of these factors is the safety of the patient. When performing caesarean myomectomy is adjudged to be harmless, obstetricians should be courageous enough to carry out fibroid removal using the opportunity the caesarean section offers. Our case had what could be best described as a "plucking myomectomy" mimicking the plucking of fruits from their attachments.

Recommendations

We recommended a thorough evaluation of the particular setting (rather than routine) and possible dangers of severe haemorrhage when deciding on whether to perform caesarean myomectomy or not. Myomectomy during caesarean section should still be considered dangerous. Only in selected cases should obstetricians consider this additional surgical option during caesarean section.

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