Unavoidable Caesarean Myomectomy Due to Multiple Anterior Uterine Fibroids: A Case Report

Onyekpa IJ1,2*, Odugu BU1,2, Nevo C1, Mba SG1, Onah LN1, Enyinna PK1, Ofonere CN1,2, Ezenweze M1, Ugwanyi TC1 and Onyekpa CS3

1Department of Obstetrics & Gynaecology, Enugu State University of Science & Technology/College of Medicine, Enugu.
2SEMINO Specialist Hospital, Abakpa-Nike, Enugu.
3Department of Nursing Services, Enugu State University of Science & Technology Teaching Hospital, Enugu.

*Correspondence:
Onyekpa Ifeanyi Johnson, Department of Obstetrics & Gynaecology, Enugu State University of Science & Technology/College of Medicine, Enugu, Phone: +2348064086359; E-mail: ifeanyi.onyekpa@esut.edu.ng and ifeanyionyekpa@gmail.com.

Received: 10 Jun 2022; Accepted: 13 Jul 2022; Published: 18 Jul 2022

ABSTRACT

Background: Caesarean myomectomy is still a controversial issue in current obstetric practice due to the fear of uncontrollable haemorrhage. However, it may become very necessary occasionally with increased prevalence of fibroids among our pregnant mothers.

Case Report: We report a case of Mrs UC, a 30-year-old primigravid woman who booked for antenatal care at 16 weeks gestational age following a 3-year history of infertility. The pregnancy was complicated with abdominal pain from red degeneration of uterine fibroid and was managed with pentazocine in the 2nd trimester. She presented in labour at 39 weeks and 4 days but labour was prolonged for 8 hours, having adequate contractions without any significant improvement in both descent and cervical dilatation. She subsequently had an emergency caesarean myomectomy with an outcome of a live female neonate that weighed 3.1kg with good Apgar scores and 2 pieces of uterine myoma that weighed 1.1kg. The post-operative and puerperal periods were uneventful.

Conclusion: Caesarean myomectomy, a controversial obstetric procedure, can be indicated when the location and size of the fibroid mass makes caesarean delivery only very challenging and difficult.

Keywords
Caesarean, Myomectomy, Fibroid, Uterine Torsion.

Introduction
Fibroids are the most common pelvic tumours in women derived from the uterine smooth muscles and are very prevalent among Africans [1]. Its occurrence increases between the ages of 25 and 35 years especially among nulliparaous women [2]. Myomas tend to increase in size during the reproductive years. The incidence of leiomyomas is not known but may range from 0.05% to 5% among pregnant women [3-5]. Fibroids are usually asymptomatic but in some significant proportion of women have been associated with infertility and complicating childbirth [6-8].

With the increasing age at pregnancy, the incidence of fibroids will continue to increase and obstetricians encounter more fibroids during caesarean deliveries and should be prepared to deal with its associated complications [9-11]. Myomectomy during caesarean delivery is usually avoided due to the increased vascularity of the gravid uterus leading to massive haemorrhage and unnecessary obstetric hysterectomy and increased peri-operative morbidity and mortality [12]. Many studies have dealt with the outcomes and safety of caesarean myomectomy with varying conclusions. Lovina SM et al. concluded that in selected patients, caesarean myomectomy is safe and effective at tertiary centres with experienced surgeons [12,13]. EY Kwawukume and Ashley in separate studies also concluded that there is no significant difference in intra-operative and post-operative morbidity and blood loss in performing caesarean section alone and caesarean section with myomectomy when a tourniquet is applied [14,15].

Citation: Onyekpa IJ, Odugu BU, Nevo C, et al. Unavoidable Caesarean Myomectomy Due to Multiple Anterior Uterine Fibroids: A Case Report. J Med - Clin Res & Rev. 2022; 6(7): 1-3.
JO Awoleke also found that with careful selection, adequate experience and efficient haemostatic measures, the procedure does not appear as hazardous as it was once thought [16].

Hence, adequate patient selection and experience are necessary before embarking on caesarean myomectomy to avoid unnecessary morbidity and mortality resulting from the procedure.

**Case Presentation**

Mrs UC, a 30 year old primigravid woman booked for antenatal care at 16 weeks gestational age following a 3-year history of infertility. At booking, she complained of severe abdominal pain but no history of bleeding from the vagina. An abdomino-pelvic ultrasound scan revealed multiple uterine fibroids of varying sizes. She was managed as a case of red degeneration of fibroid in pregnancy with opioid analgesia (pentazocine) and the pregnancy was eventually carried to term. At the gestational age of 36 weeks, a repeat ultrasound scan was done which revealed no obvious fibroid at the lower segment and she was planned for vaginal delivery. Below is the report of the scan:

She presented in labour at 39 weeks and 4 days, which lasted for 8 hours, having adequate contractions without any significant improvement in both descent and cervical dilatation. She subsequently had an emergency caesarean myomectomy with an outcome of a live female neonate that weighed 3.1kg with good Apgar scores. Other findings were a 180-degree rotation of the uterus around the isthmus that presented the posterior surface anterior due to a huge anterior fibroid of about 10cm in diameter and other multiple small uterine fibroids. The mass was also held down by adhesions making correction of the rotation of the uterus before incision impossible; hence, a posterior incision was made to deliver the baby. The uterus was subsequently exteriorized and the 2 pieces of uterine fibroids that weighed 1.1kg were removed after repairing the caesarean incision and application of tourniquet. The myoma cavity was repaired in layers with vicryl 2 sutures and the torsion corrected. The estimated blood loss was 400ml and the post-operative and puerperal periods were uneventful. Her pre-operative and post-operative haemoglobin levels were 16g/dl and 15g/dl respectively. She was discharged on the 5th day post surgery with good uterine involution. At 6-week postpartum visit she had no complaints and had not seen her menses. The uterus was barely palpable per abdomen.

**Discussion**

Ours was a case of a 30-year old primigravida who conceived after a 3-year history of infertility in the presence of multiple uterine fibroids. The literature is rich with reports of uterine fibroid co-existing with pregnancy up to 5% of the cases [3-5]. And as was the case in our patient it is a common finding among Africans above 25 years of age and being nulliparous [1,2]. This case report of a successful myomectomy during caesarean delivery with no significant difference in post-operative morbidity and mortality agrees with the findings by many researchers in the past. In separate studies of different types, many authors have shown that with good patient selection and in the hands of experienced surgeons, caesarean myomectomy may be as safe and desirable as simple myomectomy alone [12-16]. This discovery becomes important, as the average age of childbirth has increased due to career pursuit among our women. It is also important especially in the African continent as the sizes of fibroids are usually larger among African women and may complicate caesarean delivery more often [17,18]. This calls for further studies and attempts to acquire expertise in the art of caesarean myomectomy in Africa.

The fear of haemorrhage during caesarean myomectomy is not unfounded but the recent successes in the art of caesarean myomectomy tend to alter the current thinking in favour of caesarean myomectomy in the hands of experienced surgeons and with good patient selection. The post-partum uterus is considered to be better adapted to control bleeding physiologically more than in any other phase of a woman’s life time [12]. Hence, adequate counseling of the patient and her relatives on the possibilities and complications of caesarean myomectomy should be done before embarking on the surgery.

**Conclusion**

Myomectomy during caesarean delivery, though not yet a routine practice, can be as safe as doing myomectomy alone. In resource, poor countries of Africa where the burden of leiomyomas is high, caesarean myomectomy may reduce cost of treatment by avoiding...
two surgeries. This surgery should be done especially when the size and site of the fibroids make caesarean section only challenging.

References

1. Wallach EE, Thompson JS, Rock JA. Myomectomy in Te Linde’s Operative Gynaecology. Lippincott New York NY USA. 1992; 647-662.
2. Kim YS, Choi SD, Bae DH. Risk factors for complications in patients undergoing myomectomy at the time of caesarean section. J Obstet Gynaecol Res. 2010; 36: 550-554.
3. Rasmussen KL, Knudsen HJ. Effects of uterine fibromas on pregnancy. Ugeskr Laeger. 1994; 156: 7668-7670.
4. Omigbodun AO, Fawole AO. Myomectomy during pregnancy and delivery. Is it safe Commentary. Tropical Journal of Obstetrics & Gynaecology. 2005; 22: 1-3
5. Agboghoroma CO, Efetie ER, Umezulike AC. Unavoidable caesarean myomectomy a case report. Topical Journal of Obstetrics & Gynaecology. 2005; 22: 81-82.
6. Cook H, Ezzati M, Segars J, et al. the impact of uterine leiomyoma on reproductive outcomes. Minerva Ginecol. 2010; 62: 225-236.
7. Donen J, Jadoul P. What are the implications of myomas on fertility. Hum Reprod. 2002; 17: 1424-1430.
8. Qidwai G, Caughhey A, Jacoby A. Obstetric outcomes in women with sonographically identified uterine fibroid. Obstet Gynaecol. 2006; 107: 376-382.
9. Coronado GD, Marshall LM, Schwartz SM. Complications in pregnancy labour and delivery with uterine leimyomas a population-based study. Obstet Gynaecol. 2000; 95: 764-769.
10. Kaymak O, Ustunyurt E, Okay RE. Myomectomy during caesarean section. Int J Gynaecol Obstet. 2005; 89: 90-93.
11. Sheiner E, Bashiri A, Levy A. Obstetric characteristics and perinatal outcome of pregnancies with uterine leiomyomas. J Reprod Med. 2004; 49: 182-186.
12. Garg P, Bansal R. Caesarean myomectomy a case report and review of literature. J Med Case Reports. 2021; 15: 193.
13. Lovina SM, Vaidyanathan G, Nihal A, et al. Caesarean myomectomy. Sultan Qaboos Univ Med J. 2012; 12: 190-196.
14. Kwawukume EY. Caesarean myomectomy. Afr J Reprod Health. 2002; 6: 38-43.
15. Roman AS, Tabsh KM. Myomectomy at time of caesarean delivery a retrospective cohort study. MNC Pregnancy Childbirth. 2014; 4: 14.
16. Awoleke JO. Myomectomy during caesarean birth in fibroid-endemic low resource settings. Obstetrics and Gynaecology International. 2013; 6.
17. Maeshall LM, Spiegelman D, Barbiel RT, et al. Variations in the incidence of uterine leiomyoma among premenopausal women by age and race. Obstet Gynaecol. 1997; 90: 967-973.
18. Kjerulff KH, Langenberg P, Seidman JD, et al. Uterine leiomyomas. Racial differences in severity symptoms and age of diagnosis. J Reprod Med. 1996; 41: 483-490.