

CAESAREAN MYOMECTOMY: A CASE REPORT OF A 33-YEAR OLD PRIMIGRAVIDA AT TERM IN FEDERAL MEDICAL CENTRE, OWERRI

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Myomectomy is a common gynaecologic procedure and may be performed during caesarean section in well selected patients without adverse outcomes. The combined procedure is controversial amongst Obstetricians. This is one of the case report studies in Federal Medical Centre, Owerri on caesarean myomectomy. It aims to improve the skill, knowledge and mind-set of medical personnel in making decisions about caesarean myomectomy, its complications and post-operative care.

The case is about a 33-year old primigravida who presented with a term pregnancy and a 16cm x 20cm subserosal-intramural uterine myoma located at the fundus. Caesarean myomectomy was done for her with minimal intra-operative haemorrhage. The myoma weighed 750g. Outcome was a live female neonate with birth weight of 2.8kg and good Apgar score. There was no intra-operative or post-operative complication. Post-operative period was uneventful.

Keywords: myoma, leiomyoma, myomectomy, pregnancy, caesarean section

INTRODUCTION

Uterine leiomyomas are the most common pelvic tumours in women over the age of 30 with an incidence ranging from 0.1 – 10.7% of all pregnancy.¹ It is now more frequently seen as many women delay childbearing with the attendant risk of myoma growth and also due to the advancement in ultrasonography and hence improved capability of detecting small myomas.¹

There is increased growth of myoma during pregnancy resulting in more complications during pregnancy, labour and puerperium.² There are still controversies regarding caesarean myomectomy due to increased risk of intra-operative/post-operative haemorrhage, increased operating time and increased post-operative morbidity.² Those in support of caesarean myomectomy consider it easier to enucleate myomas in gravid uterus because of the looseness of the fibroid capsule.³ Bleeding can subsequently be stopped by contractions and retractions of muscle fibers aided by oxytocic agents.³ Myomectomy during caesarean section is a safe procedure in well selected patient though most obstetricians are trained to avoid it due to the risk of uncontrollable intra-operative haemorrhage, sepsis and increased operative time especially in poorly selected cases.³

As more knowledge about it is gained over time, different decisions can now be given when myomas are encountered in pregnancy. Pedunculated myoma can easily be removed and haemostasis secured without endangering the mother's life especially

ABSTRACT

if the site and size is put into consideration. With adequate experience, careful patient selection and efficient haemostatic measures, caesarean myomectomy can be safely performed.⁴

CASE PRESENTATION

History, examination and management: A 33-year old primigravida presented to our centre with a term pregnancy and a solitary pedunculated subserosal-intramural myoma. It was diagnosed by a pelvic scan at 16 weeks gestational age which showed a bulky anteverted uterus containing a single viable embryo with normal embryonic heart activity and a huge fundal pedunculated fibroid measuring 16.8x 15.0cm. In the course of her antenatal visits she developed abdominal pain, necessitating her referral to our centre at twenty eight week gestational age but she presented at term. She was healthy-looking but mildly pale. Her pulse rate was 80bpm, blood pressure of 120/80mmhg and respiratory rate of 24cycles per minute. The abdomen was enlarged and moved with respiration. Symphysis-fundal height was 45cm. Obstetric ultrasonography showed an active single intrauterine foetus at a gestational age of 38 weeks with a fundally-located placenta and adequate liquor volume. It also showed a 20 x 16cm mass with thick capsule located at the left fundal region. Blood tests showed normal levels and blood group was O rhesus D positive. Four units of compatible blood were grouped and cross-matched. Caesarean myomectomy was proposed, planned and discussed with the patient.



Written informed consent for the procedure was obtained. Surgery was performed under combined spinal-epidural anaesthesia. Operative findings included an enlarged abdomen, clear peritoneal fluid, well-formed lower uterine segment, live female neonate with APGAR score of 8 in the first minute and 10 in the fifth minute, birth weight was 2.8kg, placenta and membranes were complete and healthy, massive subserosal-intramural uterine myoma located at the fundus just superior to the left fallopian tube and attached posteriorly to the omentum measuring 16cm x 20cm. Following the delivery of the baby and the placenta, the uterus was closed in layers using vicryl 2. The uterus was exteriorized and tourniquet was applied at the lower uterine segment. Then myomectomy was performed and the myoma bed closed with vicryl 2 sutures. Tourniquet was removed, haemostasis achieved and anterior abdominal wall closed in layers. Estimated blood loss was 500ml. The duration of surgery was one hour. The myoma weighing about 750g was sent for histology and an abdominal drain left in-situ to evaluate any bleeding. She was placed on oxytocics, antibiotics, analgesics and intravenous fluid. The post-operative period was uneventful and she was discharged on the 5th post-operative day. She was subsequently seen 2 weeks and 6 weeks later at the postnatal clinic in satisfactory condition. Histology result showed sections of interlacing bundles of smooth muscles with no evidence of malignancy.



DISCUSSION

Caesarean Myomectomy has been an area of controversy over the years due to fear of intra-operative / post-operative haemorrhage.² Currently, there are increasing reports that myomectomy performed during caesarean section by experienced experts does not increase the risk of haemorrhage, post-operative fever or prolong hospital stay in carefully selected cases.^{4,5,6,7,8,9} A prospective study done by Kiran et al⁵ and a retrospective study by Rong et al⁶ in China found no significant difference in the outcome between the pregnant women with uterine fibroid who underwent myomectomy during caesarean section and those that had only caesarean section. This is in keeping with our observation in the case managed where there was no uncontrollable intra-operative/post-operative haemorrhage, no post-operative fever nor increased hospital-stay. However, the duration of surgery was increased. In a case by Sachan et al, myomectomy was performed prior to the delivery of the baby through the same incision without any complication.² In their study, electrocautery was used to control haemorrhage.² Mohd et al performed myomectomy after the delivery of the baby but the surgery was complicated by postpartum haemorrhage secondary to uterine atony necessitating blood transfusion and high-dose oxytocin infusion.³ In the index, myomectomy was performed after the delivery of the baby using tourniquet to reduce intra-operative blood loss. Oxytocin was used intra-operatively and maintained post-operatively for the first 24 hours. Our patient was not transfused as she remained haemodynamically stable and postoperative blood levels were normal.

CONCLUSION

Caesarean myomectomy is now considered as a safe and not always hazardous procedure especially when performed in carefully selected cases by well experienced hands, in a well-equipped tertiary institution with the advent of better anaesthesia and availability of compatible blood.

CONFLICT OF INTEREST; NON DECLARED



Discussion

Sourcing medical disposables in Africa can sometimes be a herculean task; especially when they are not produced locally^(1, 2). Tracheostomy tubes, especially sizes not frequently used, get expired often on the shelves of marketers; who subsequently limit their products to adult sizes that have a higher turnover rate and better profit on the long haul. This creates a situation where the sizes not commonly used get out of stock because of low volume purchases. Often times, they are not stocked at all.

Tracheostomy tubes can be made of silicone, polyvinyl chloride (PVC) or metal. They come in different shapes that can be customized to the need of the patient. They could also be angled or curved (cuffed or non-cuffed)^(3,4,5). They come with flanges (neck plate) and tapes to help secure the tubes around the neck. A neck plate arises from the sides of the factory-made tracheostomy tube and has holes through which tapes or strapping are attached around the neck. For tracheostomy tubes of these sizes (3.5mm, 3.0mm), not commonly used, non-availability can pose serious threat to life. In this instance efforts to get these proved abortive. We had to make use of available resources- a size 3.0mm internal diameter PVC endotracheal tube (figure 6-boiled and preformed), improvised as a tracheostomy tube. This helped to facilitate weaning and decannulation. Gladly this was successful.

Instances exist in literature where endotracheal tubes were used for emergency tracheostomy as interim life-saving tool until appropriate size of tracheostomy tubes are available⁽⁶⁾. In this scenario, the risks of extubation was always present⁽⁷⁾. The problems of tracheal irritation was rife especially in conscious patients, since the required curvature of the tube was absent. Heating of the PVC endotracheal tube in a preset shape with a copper stylet in boiling water at 100°C gave us the angled shape required. The absence of the flanges in the endotracheal tube; (unlike in the factory purpose made tracheostomy tube), made it mandatory to tie the knot at the back of the neck after applying opposite traction on the connector. This was further strapped down with plaster. Patency of the tube and curvature were sustained.

"Tracheostomy" suctioning was not affected with the use of an appropriate-sized suction catheter. Close patient monitoring was ensured to avoid hypoxia from blockage of the tube and dislodgement.

She was successfully decannulated 72 hours after stepping down from a size 4.0mm tracheostomy tube to a size 3.0mm preformed. Tracheostomy tube decannulation can be done in several ways^(8, 9, 10, 11, 12). This can be done by deflating the tracheostomy cuff and allowing patient to breath after occlusion of the tube at safe intervals until patient is comfortably breathing through the nostrils. Close monitoring of oxygen saturation is advised: a single step removal of tracheostomy is done. In children sometimes, multiple serial steps of decannulation with gradual reduction in tracheostomy tube size is advised until breathing through the nostrils is comfortable and safe. In this patient the step down in tube size was the safest option as the other modality failed.

Conclusion

The successful decannulation in this patient in the midst of grave necessity is not an unusual event faced by surgeons practicing in resource constrained environment. A situation where available human resource is compelled to make the best of minimally available equipment and disposables.



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