Cesarean myomectomy: A case report in Zainoel Abidin General Hospital, Banda Aceh, Indonesia

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Abstract. The objective of the present study was to improve skill and knowledge in making a Cesarean myomectomy decision, its complications and its post operative care. Uterine myomas are the most common pelvic tumors over the age of 30. The incident of myomas in pregnancy are 0.05-5%.Myomas are now more frequently seen as many women delaying childbearing which is the time for greatest risk of myoma growth. Also the use of ultrasonography has improved the diagnostic capability of detecting small myomas and has increased our knowledge of myomas in pregnancy. Myomectomy during cesarean section has traditionally been discouraged because of the risk of uncontrollable hemorrhage. There are approximately 7 choices to be made according cesarean myomectomy such to leave it be, to leave it with Uterine artery ligation, to remove pedunculated fibroids only, to remove pedunculated, anterior subserous or lower uterine segment fibroids, to remove all anterior uterine fibroids, to remove all fibroids and selective removal of fibroids. A 32- year-old, gravida 3 para 2, Indonesian women presented with postterm-pregnancy and 20 cm intra mural- uterine myoma. Cesarean myomectomy was done to her with little to none intraoperative hemorrhage. Post C-section we found complications shown by uterine atony, profuse bleeding seen at the drainage through the peritoneum and marked changes in hemoglobin value. It is then carefully evaluated and managed using extensive follow up, high dose oxytocyin and blood transfusion. Cesarean myomectomy is now considered by many not always as a hazardous procedure and can be performed in experienced hands, in a well equipped tertiary institution, with the advent of better anesthesia, with availability of blood, in selected patients and according to site and size of myomas. It is always important to have a good informed consent beforehand and post operative care of cesarean myomectomy.

Keyword: Myoma, pregnancy, cesarean-myomectomy

Introduction

Uterine myomas are the most common pelvic tumors in women over the age of 30, with incident during pregnancy ranging from 0.5% - 5%.[1-2] Myomas are now more frequently seen as many women delaying childbearing which is the time for greatest risk of myoma growth. With its growth during pregnancy, it gives many complication for pregnancy, labor and the puerperium (Dandade et al., 2003).

Myomectomy is a surgical procedure which is usually not performed during cesarean section due to increased association with high risk of hemorrhage and difficulty in securing hemostasis (Sudhir, 2006). With the exception of small, pedunculated fibroids, most of the leading obstetrics textbooks advise against myomectomy during cesarean delivery due to theoretical risks of intractable hemorrhage and increased postoperative morbidity. In the medical literature, however, there are few studies which directly address this controversy (Roman AS, Tabsh, 2004).

We present a case of an intra mural uterine myoma diagnosed during pregnancy which was successfully managed by cesarean myomectomy

Case Presentation

History, examination and management

A 32-year old Indonesian women, *Gravida* 3 *Para* 2 presented to our center with a postterm pregnancy and an intramural myoma. It was diagnosed during pregnancy on the rural hospital and therefore referred to the tertiary level hospital. There was minimal symptoms associated with myomas during pregnancy. The patient was well-looking but clinically pale. The pulse rate was 80 beats per minute and the blood pressure was 120/80 mmHg. The respiratory rate was 24 cycles per minute. The abdomen was distended according to gestational age. Abdominal sonography showed an intra-uterine viable singleton fetus of 42 weeks gestation. It also showed a 20x20x15 cm tumor with a thick capsule located at the right superior aspect of the uterus. Blood tests showed at normal levels. The patient's blood group was 0 Rhesus positive. Cesarean myomectomy was proposed, planned and discussed with the patient. Surgery was performed under general anaesthesia with endotracheal intubation. Operative findings included normal liver, spleen, kidneys, diaphragm, ovaries and fallopian tubes. The uterus was soft and the size was adequate for

term pregnancy with palpabe myoma in the right superior uterus. With c-section born baby boy 3100gr , body legth 49 cm, APGAR Score 9/10. After suture of the uterine low segment, we then performed the myomectomy.

An intramural myoma was situated at the right superior aspect of the uterus (Figure 1). It was removed and the myoma bed was quickly closed with 2-0 polyglactin suture and hemostasis was easily achieved. The estimated blood loss was 600 mls and 1 units of *Packed Red Cells* were transfused intra-operatively. The tumor weighing approximately 750 gram was sent for histology. We then put a peritoneum drainage to evaluate any bleeding. Post operative, we found uterine atony, profuse bleeding seen at the drainage through the peritoneum and marked changes in hemoglobin value. Then we performed post partum hemorrage therapy by using 2 intravenous line with 20 IU oxytocyn on 500 cc Ringer Lactate and blood tranfusion. The atony is then managed and the patient is stable. The post-operative treatment was remarkable and the woman was discharged from the hospital 4 days after the operation. The histology report showed sections of interlacing bundles of smooth muscles with no evidence of malignancy. The 6 weeks post-operative visit was unremarkable.

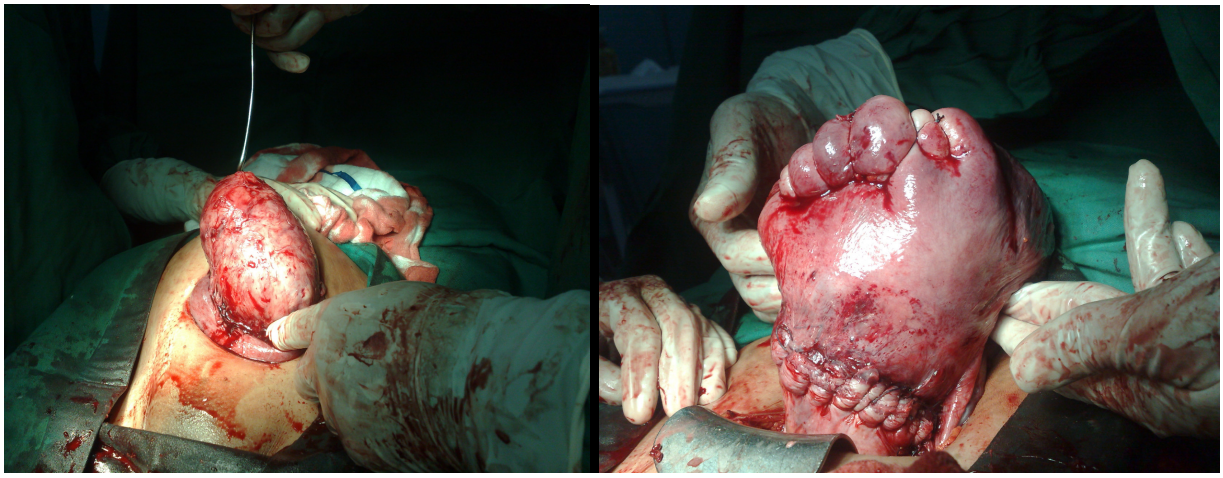

Figure 1. Myomectomy after delivery of the baby

Figure 2. Intra mural myoma

Discussion

Myomectomy during cesarean section has traditionally been discouraged throughout the time. The debate concentrate mostly on the uterine atony and post partum hemorrhage caused by it (Sudhir A and Sebanti, 2006). There are increasing study nowadays that myomectomy performed at time of cesarean delivery does not increase the risk of hemorrhage, postoperative fever, or prolong hospital stay particulary in special cases (Michalas et al., 1995; Ortac et al., 1999; Ehigiegba et al., 2001; Kaymak et al., 2005) Most case series and study results indicate that in selected patients and in experienced hands, cesarean myomectomy can be a safe procedure.

Burton et al reported 13 cases of cesarean myomectomy (Burton et al., 1989). In this study only one case was complicated by intraoperative hemorrhage. They concluded that myomectomy during cesarean section may be safe in carefully selected patients. Ortac et al reported 22 myomectomies performed for large myomas (>5cm) (Ortac et al., 1999). They advocate myomectomy in order to minimize postoperative sepsis. In this study there was no difference in the incidence of post operative fewer between the myomectomy groups and the controls.Roman et al underwent 111 myomectomy at time of cesarean delivery compared to 257 patient with cesarean delivery alone and found no difference in the incidence of intra and post operative complication (Roman and Tabsh, 2004) The lack of size in the myoma in the study make it a indecisive conclusion about it complications. In their study, Kaymak et al showed that there was no difference in hemorrhage incidence between the myomectomy groups and the controls. Kaymak et al. (2005) stated that another important point was that despite the high rate of large myomas, no hysterectomy or other procedures to control bleeding was perfromed in any case. Cobellis et al. (2002) have reported removal of multiple fibroids by electrocautery during LSCS. In a comparative study of cesarean myomectomy on 16 women Brown et al. (1999) showed that the mean blood loss in cesarean myomectomy was 495 mL (range 200-1000mL) compared with 355 mL (range 150-900 mL) in the control group. This does not justify discouraging cesarean myomectomy. In a study conducted on 24 women in Ghana, the average duration of operation was longer in cases having myomectomy with LSCS (62.08 minutes) than in those who had LSCS only (50.83 min) (Kwawukume, 2002). Roman et al. (2004) studies showed that there are no statistically significant difference between intramural myomectomy or myomectomy of a fibroid greater than 6 cm in diameter and the control group, this lack of a difference may be attributed to a small sample size and therefore insufficient power to detect such a difference. Thus, intramural myomectomy should be performed with caution (Roman et al., 2004). Though myomectomy during pregnancy is still not encouraged, cesarean myomectomy is a feasible undertaking. The reasoning behind this is that a uterus in the immediate postpartum phase is better adapted physiologically to control hemorrhage than in any other stage in a women's life (Fletcher and Frederick, 2005).

Regardless of the factors that taken into account to perform cesarean myomectomy, communication and information sharing with the patient regarding the procedure and the risk behind it is as important as the procedure itself. Along with it, good post operative care should also be done to observe any unusual complication that may happen.

Conclusions

Cesarean myomectomy is now considered by many not always as a hazardous procedure and can be performed in experienced hands, in a well equipped tertiary institution , with the advent of better anesthesia, with availability of blood, in selected patients and according to site and size of myomas. It is always important to have a good informed consent beforehand and post operative care of cesarean myomectomy.

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