



Research Article

MYOMECTOMY AT TIME OF CAESAREAN-SECTION: ABOUT ONE CASE AND LITERATURE REVIEW AT COCODY UNIVERSITY HOSPITAL, ABIDJAN (CÔTE D'IVOIRE)

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ABSTRACT

We report a case of myomectomy during a cesarean-section for myoma previa and breech position of the foetus. The uterine myoma occupied the all anterior wall of the lower segment of the uterus making it impossible the hysterorrhaphie without a prior myomectomy. He is a patient carries a large anterior isthmic myoma of 71 mm diagnosed early in pregnancy, which the conduct is made without complications of the myoma. The foetus was in the breech position. Caesarean-myomectomy has been performed without complication per and post operatively. This clinical case shows the feasibility of the caesarean-myomectomy in some clinical situations. However this action must not be carried out systematically.

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INTRODUCTION

Uterine fibroids are the most common pelvic tumors in women of childbearing age [1, 2]. Uterine fibroids are found in 0.3 to 5% of cases in pregnant women [3, 4]. The association uterine fibroid and pregnancy is increasing, due to the widespread use of ultrasound during pregnancy. However, uterine fibroids are not always symptomatic and do not present the same severity [5]. The association uterine fibroid and childbirth can be at risk. Concerning the surgical management, myomectomy or polymyomectomy during the caesarean section, called caesarean-myomectomy is classically considered as a contraindication.

It's a dangerous procedure because it can end with a hysterectomy unexpected, causing the loss of capacity reproductive of the patient. However some situations can lead to the cesarean-myomectomy. We are reporting a case of myomectomy during a cesarean without complications followed by a literature review.

Clinical case

Madam KKAC, 32 years old, unemployed, primigravida, was carrying a pregnancy and a uterus with many fibroids. The diagnosis of anterior isthmic myoma of 71 mm was made at diagnosis of pregnancy at 08 weeks of amenorrhea. She had no other medical and surgical history. The pregnancy course was normal without complication of her fibroids.

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She attended 5 times antenatal visits and her blood check was normal. Indeed, the hemoglobin level was 12.3 g/dl; hematocrit was 36%. There were platelets 257 000 /mm³. Blood sugar level and kidney function were normals. The different drug and vaccine prophylaxis recommended during pregnancy have been made. At The term, physical examination found a good general condition, colorful conjunctiva, constant hemodynamic normals (blood pressure 100/60 mmHg, pulse 88 bpm, temperature 37°2C), an absence of uterine contractions, uterine height 35 cm with a previous anterior previa myoma, heart sounds of the fetus to 140 bpm perceived into the supero-outer quadrant of uterus. An ultrasound examination performed at 38 SA, found an eutrophic foetus in breech position, normal morphology, amniotic fluid in satisfactory quantity, a posterior placenta far from the cervix and the presence of a myoma previa of 104 mm x 87 mm without sign of necrobiosis. A preoperative blood check shows: hemoglobin 12.1 g/dl; hematocrit 36.5%; platelets 312 000/mm³. Cesarean-section has allowed extraction of a newborn, male, weight 3800 g, size 50 cm, perimeter of head 34 cm, APGAR score 8 and 9 at first minute and at five minutes. We performed a vertical segmental cesarean-section at the lateral part of the lower segment of the uterus (see image 1). During the procedure, we noticed the presence of a myoma previa intramural (see image 2), prevented the closure of our hysterotomy. Opposite this difficulty, we realized a myomectomy (see images 3 and 4). The hysterorrhaphy was done by points in X with the suture N ° 1. Blood loss from a graduated jar and compresses were 400 ml. The operating time was 57 minutes and blood pressure post operative was 108/63 mmHg. We have not noted incidence of post operative. The hemoglobin level after 24 hours post-operative was 11.9 g/dl.

The post-operative moment was uneventful. After three days of hospital stay, the patient went out.

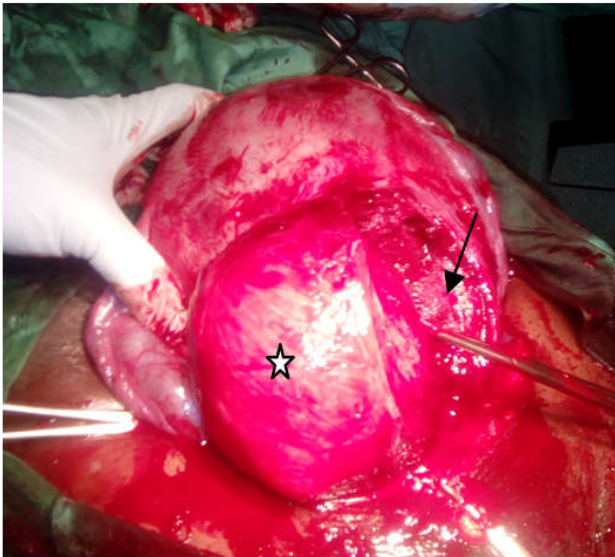


Image 1 Vue opératoire de face d'un utérus gravide présentant un myome praevia (☆) occupant toute la face antérieure du segment inférieur : visualisation de la zone d'incision verticale latéralisée (↙) du segment inférieur ayant permis l'extraction du fœtus.

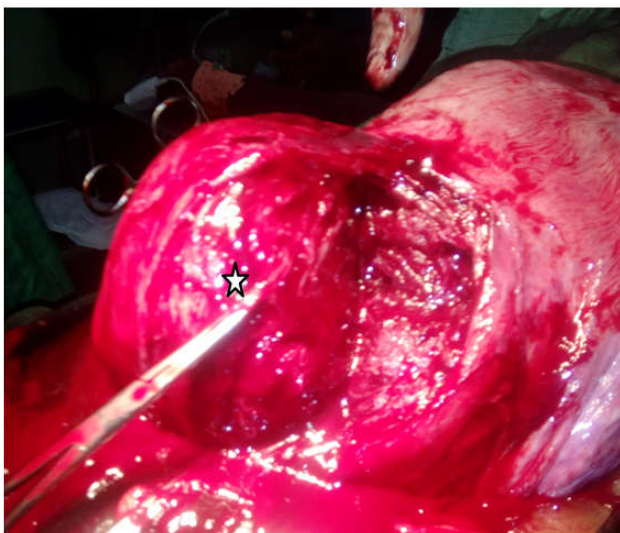


Image 2 Operative profile view of a gravid uterus presenting a myoma praevia (☆) occupying the entire thickness of the myometrium of the lower segment corresponding to the type 2-5 FIGO's classification 2011 of uterine myomas.

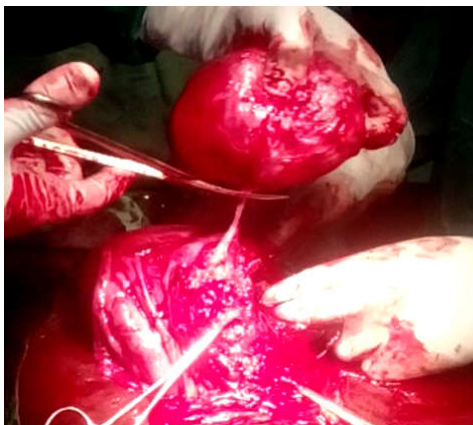


Image 3 View operating showing the ablation of the myoma uterine praevia after extraction of the foetus. course of Caesarean section



Image 4 view of the removed uterine myoma

DISCUSSION

Many studies demonstrate the feasibility of cesarean-myomectomy. But we have not found the frequency of this surgery. It is reported in the literature from one to a hundred [3, 6, 7]. In our working environment, this is an exceptional surgical procedure in practice; the only case we report. Usually, we do myomectomy outside the gravido-postpartum period. In terms of literature, it shouldn't be an exceptional surgical act. Usually, we perform myomectomy outside the gravido-postpartum period. According to the literature, it shouldn't be an exceptional surgical procedure. Indications of myomectomy during cesarean section have been described: fibroids sitting on the lower segment, fibroids localized outside the lower segment but with a subserous position and having a risk of torsion (pedunculated subserous fibroids or fibroid too large at least 10 cm) [5]. According for the French National College of Gynecology and Obstetricians (CNGOF) [5], a clinical situation of myomectomy of need during the c-section, myoma praevia case example, can be considered as an indication. In our case, it was an intramural myoma praevia development both subserous and mucous (see image 2). It corresponds to the type 2-5 FIGO's classification 2011 of uterine fibroids [8]. Moreover, for some authors, any type of uterine fibroid regardless of localization can be an indication of myomectomy during cesarean section. Indeed, myomectomies during cesarean section were conducted regarding myomas mucous in 3.7%, intramural myomas in 32.7%, with no pediculated subserous myomas in 46.9% and the pediculated subserous myomas in 12.2% [1, 5]. The cesarean-section rates, in the cases of uterine fibroids, are up 73% [9], mainly due to obstetric dystocia and a vicious presentation of the foetus. In addition, the risk of having a caesarean section is more 8 times greater in the presence of many fibroids into uterus than in the presence of a single fibroid [4]. Complications of cesarean-section, in the cases of uterine fibroids, are hemorrhages of the postpartum immediate, uterine atony, puerperal infections that can require a secondary hysterectomy. These complications are more observed myoma in mucous and myoma praevia [9]. That's why in some situations, authors recommend a myomectomy during cesarean-section [1]. It is generally accepted that the cesarean-myomectomy must be made by an experienced obstetrician [3, 5]. Because, there may arise the problem of the incision on the lower segment of the uterus and the difficulty of the extraction of the foetus due to the size of the myoma praevia (over 10 cm), occupying the entire of the lower segment of the uterus. In this case, a first myomectomy followed of the incision of the lower segment would fetal extraction [10]. In this situation, the

bleeding may be more important. Very often the foetal extraction is carried out at first time and secondly myomectomy [1]. In our case, a vertical incision on one side edge of the myoma previa enabled fetal extraction and then in a second time the myomectomy can was performed (see pictures 2 and 3). In the literature, we have not found publications on this type of incision preferentially to realize on the lower segment. Concerning the per-operative complications of cesarean-myomectomy, Exacoustos and all [11] in 1993 reported 3 complicated cases of serious bleeding of 9 cases, requiring a hysterectomy. Furthermore, a large case-control series published by Roman and all [7] in 2004 comparing 111 cesarean-myomectomy versus 258 cesarean-sections without myomectomy has not found significant difference concerning the complications: 0.9% of blood transfusion against 1.2%; No hysterectomy in 2 groups. Machado and all [3] reported from his series that the large size of the myoma was associated with significant blood loss with an example of 3200 ml of blood lost due to the removal of a previa myoma measuring 10cmx12cm. In order to minimize the bleeding during Cesarean myomectomy, authors [12, 13] described a temporary system of pericervical tourniquet to the uterine arteries known as technical of the tourniquet. In five controlled studies [1], the authors have compared a group of myomectomies per-caesarean sections to a control group of c-sections without myomectomy. These studies have not found significant difference on the variation of pre and post operatively to hemoglobin, on the number of immediate postpartum bleeding, on the number of blood transfusions and the incidence of postoperative hyperthermia. In a meta-analysis evaluating the safety of myomectomy conducted during delivery by caesarean section published by Song et al [14] in 2013 about 1082 patients carrying myomas including 443 caesarean-myomectomies and 639 cesarean-sections only, there is not a significant difference in terms of bleeding complications. Two studies found a significant lengthening of the operating time of 15 minutes and the length of hospital stay. However, in all these studies, the authors recommend to rigorously choose patients that offer this type of intervention without specifying the selection criteria [15]. Cesarean-myomectomy limited to the only myoma previa would cause fewer complications compared to cesarean-myomectomy on multiple myomas of various positions [3].

CONCLUSION

In according to the literature, cesarean-myomectomy can be done safely for patients but should not be systematic. It causes no more complications compared to cesarean section without myomectomy. In cesarean-myomectomy procedure, myomectomy should focus on the myoma previa or a pedunculated subserous myoma presenting a risk of torsion. This procedure should be performed by a experienced obstetrician.

Conflict of interest statement: the authors declare non conflict of interest.

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