

# Myoma Delivered through the Cervical during Labor: About a Case and Review of the Literature

Touré Écra Ana<sup>1</sup>, Konan Blé Rémy<sup>1</sup>, Marcel N'Cho Edi<sup>2</sup>, Koffi Koffi Abdoul<sup>1</sup>, Aka Edel<sup>1</sup>, Konan Perel<sup>1</sup>, Olou Luc<sup>1</sup>

<sup>1</sup>Université Félix Houphouët Boigny, Abidjan, Côte d'Ivoire

<sup>2</sup>Hôpital Général de Yopougon Attié, Abidjan, Côte d'Ivoire

Email: anaecra@yahoo.fr, konan\_ble@yahoo.fr, marcedi@yahoo.fr, kkoffiabdoul@yahoo.fr, edelpap@gmail.com, konanperel@yahoo.fr, nguessanolou@gmail.com

**How to cite this paper:** Ana, T.É., Rémy, K.B., Edi, M.N., Abdoul, K.K., Edel, A., Perel, K. and Luc, O. (2023) Myoma Delivered through the Cervical during Labor: About a Case and Review of the Literature. *Open Journal of Obstetrics and Gynecology*, 13, 97-102.

<https://doi.org/10.4236/ojog.2023.131011>

**Received:** November 27, 2022

**Accepted:** January 28, 2023

**Published:** January 31, 2023

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## Abstract

The authors report the clinical case of a multipara whose intracervical myoma had been diagnosed during the prenatal follow-up and who was delivered into the vagina during labor. Caesarean section was indicated to avoid rupture of the pedicle during fetal expulsion. The myomectomy was performed in a second operation via the vagina, without complications.

## Keywords

Fibroids, Pregnancy, Childbirth, Location

## 1. Introduction

Fibroid can interfere with all stages of reproductive period: conception, pregnancy but they also complicate delivery. The involvement of myomas in women infertility depends on their size, number and location.

The discovery of a myoma is a common situation that will raise questions and concerns according to the context.

This clinical case reports the medical observation of Mrs. K.J, 38 years old, G7 P4 with prior four vaginal deliveries, and two early miscarriages; the last childbirth was four years ago. There were no complications in the immediate and late postpartum period. The patient never knew that she had a myoma.

She went to the hospital three weeks ago in a second level maternity for abdominal and pelvic pain during her pregnancy estimated at seven months according to an approximation of the menstrual period. Indeed, she did not know the exact date of the last period and hadn't had any prenatal consultation before.

It was her first contact with the medical staff.

During this first consultation, the obstetrical examination revealed one low intensity contraction within 15 minutes, the uterine length (UL) was measured at 29 cm, the pelvic excavation was empty, witnessing a still high presentation, the fetal rhythm (FR) was well perceived, the cervix was well accessible, it was about two centimeters long and admitted a finger at external and internal cervical os; a firm intracervical mass with smooth and regular surface was perceived through the internal os. The midwife immediately evoked an intracervical fibroid with a premature delivery threat. She administered an antispasmodic treatment as an outpatient treatment and referred the pregnant woman to an obstetrician.

The ultrasound required on the same day assessed the gestational age at 34 weeks of amenorrhea.

No biological analysis had been carried out, apart from his HIV serology, which was negative.

The patient didn't consult any obstetrician immediately but three weeks later, on theoretically full-term pregnancy, because of the resumption of pain. On obstetrical examination, the UL measured 31 cm, the FR was regular and on vaginal touch, one painless firm mass was perceived, with a regular surface. The uterine contractions were irregular, with moderate intensity. A false labor was mentioned, but the patient was kept in hospital with parenteral antispasmodic treatment due to lack pain tolerance.

After a lull of about two hours, the uterine contractions started again, of moderate intensity and still irregular. During uterine contractions, the patient felt the expulsion of a mass through the vagina. It was a pinkish mass, with a bumpy surface, firm, but softened in certain areas, painless, about 15 cm long axis by 10 cm thick. Vaginal touch was possible because the mass did not obstruct the vagina. We perceived a pedicle with a wide base of implantation, about three cm, occupying half of the anterior lip of the cervix (**Figure 1**).

The diagnosis of fibroma in hyalin degeneration or necrobiosis in a full-term pregnancy was first diagnosed. The labor really started four hours later; the cervix was opened to four cm.

The FR was well perceived in the left lower quadrant of the abdomen, and the amniotic fluid perceived through the cervical os is tinged with meconium (**Figure 2**).

Faced with the possibility of rupture of the pedicle with tearing of the cervix during childbirth, we opted for a cesarean section.

By classic transverse segmental caesarean section, was extracted a male child, weighing 2750 g, measuring 44 cm, with a head circumference of 33 cm, Apgar's score 7 in 1' and 8 in 5'.

The uterine revision made it possible to verify the presence or not of sub-mucous or intra cavitary myomas. There was none of them avec the pedicule had no intra uterine implantation. There was neither myoma on the uterine wall.

We proceeded to the usual uterine suture with Vicryl and parietal closure.

In the second operation stage, the patient was placed in a gynecological posi-

tion. Uterine emptiness allowed better exploration of the mass: the base of the pedicle was then better perceived; it was implanted on the anterior lip of the cervix. We also perceived a descent of the bladder, subjected to the weight of the myoma. An anterior colpotomy was performed with cleavage between the uterus and the bladder. The bladder was pushed back. Two Jean Louis Fort forceps were placed on the pedicle base and it was severed between the two clamps. A suture was made on the slice of section et the hemostasis was satisfactory.

The operating piece weighs 1700 grams.

The vulva after the procedure looks normal (Figure 3).

The anatomopathology of the operating piece showed proliferation of myocytes with squamous cell of Malpighian type, without cytonuclear atypia or mitosis. A leiomyofibroma was then diagnosed.

Three weeks after the postoperative evolution is simple.

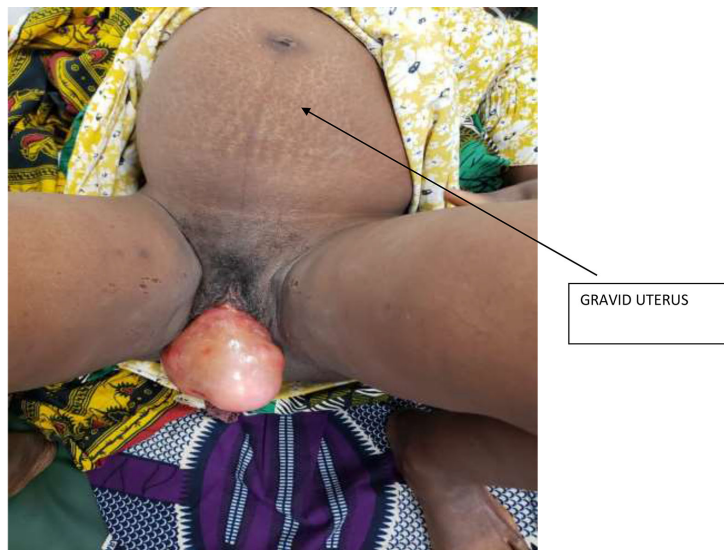


Figure 1. Expelled mass before delivery.

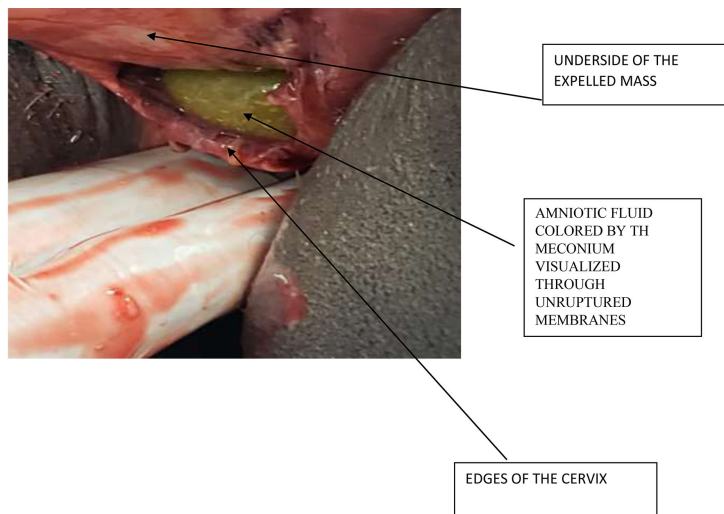


Figure 2. Dilated cervix during labor.



**Figure 3.** Appearance of the vulva after removal of the mass.

## 2. Discussion

Uterine fibroids are the most common benign tumors of the female genital tract in women of childbearing age. They affect 20% to 25% among them and are three to nine times more frequent in black women than in white women [1].

From the age of 50, 70% to 80% of women have to face myomas [2].

It is a pathology well known by the black populations especially by the Africa people; indeed, myomas have the bad reputation to be the cause of certain and permanent infertility. Do not we say that in Africa, a woman gives birth or has myomas?

The cervix is the rarest location of fibroids (less than 2% in most studies) [3] [4] [5].

Due to the rarity of this location compared to the others, its clinical implications are not very often described, and the interest is less.

Most studies indicate a significant increase in fibroid volume during the first trimester, no change during the second and third trimesters, and regression after delivery [6].

But it could be in this case report, that the myoma's volume increased during pregnancy, and then, being expelled at the end of pregnancy because of the volume.

The involvement of estrogens in the pathophysiology of myomas has been discussed for a long time because of their non-existence in prepubescent girls, and the regression of these myomas at menopause.

Several elements plead in our case report point to a low location of the fibroid, but also to a relatively small surface:

- The full-term development of a pregnancy.
- The cephalic presentation, therefore eutocic.
- Intravaginal expulsion of the myoma before childbirth.

Indeed, myomas are known for their complication during pregnancy, such as spontaneous miscarriages or threatened premature deliveries, and dystocic presentations [7] [8] [10] [11].

The localization of our patient's myoma is indeed cervical and pediculate, the

pedicle being short, and having an implantation base of about four centimeters; it can therefore, explain the maintenance of the tumor in the vagina after its protrusion outside the cervix during the pregnancy.

While threatened preterm labor is a known complication of fibroids, preterm labor itself is a controversial complication [12].

Our patient presented early uterine contractions, probably related to Braxton-Hicks.

The myomas that affect fertility are mainly those of type 0, 1 and 2, that is to say those that have an impact on the uterine cavity. The involvement of other types of fibroids is controversial depending on their size.

The mechanisms of this infertility are: [9] [13].

- The deformation causing abnormalities of endometrial receptivity.
- The hyperoestrogénic hormonal environment.
- Alteration of endometrial development.

The involvement of low located myomas is not specifically mentioned; indeed, they are not the cause of the usual symptoms of fibroids: menorrhagia, infertility. It is therefore easy to understand that our patient was not infertile.

The squamous component on the sample argues rather for an exocervical fibroma. It would then be an exocervical fibroid with a development in the cervical ductus. It is the weight of the fibroid added to intrauterine pressure during uterine contractions that caused the expulsion of the fibroid.

It is accepted that caesarean section is not appropriate for all uterine fibroids; indeed, it is the voluminous fibroids very low located, which can constitute an obstacle to the progression of the fetal mobile and require a cesarean section. The main immediate postpartum risk is that of hemorrhage, due to a lack of uterine retraction after delivery.

In our patient's case, what motivated the caesarean section was the fear of the risk of rupture of the fibroid pedicle during the passage of the fetal head with therefore cataclysmic hemorrhage.

As the availability of blood products is a crucial problem in our countries, anticipation is the guarantee of improving maternal prognosis.

The risk of hemorrhage due to uterine atony was minimal in our patient since the cervix does not enter into the process of live Pinard ligatures [14].

The immediate and late delivery suites were simple for the patient.

### 3. Conclusions

Fibroids are the most common and best known benign tumors in women. Indeed, their supposed repercussion on fertility makes them a formidable pathology in the popular consciousness.

But, the case reported here, shows once again that the fibroid can be not only compatible with a pregnancy, but also with a normal childbirth.

Due to the complications that remain possible, a delivery in a hospital environment remains desirable.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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