# Myoma Praevia in a Pregnancy Carried to Term: A Case Report and Updated Review of the Literature

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Abstract:- The fibroleiomyomatous uterine pathology is frequent and the relationships between myomas and pregnancies are three fold: fibroids can prevent conception and implantation; fibroids can complicate the evolution of pregnancy, delivery and postpartum; and the gravidic state can facilitate the evolution of fibromyomas towards complications.

We report the case of a patient who was followed in our training from 19SA+1d whose ultrasound showed an interstitial isthmic myoma praevia and an evolving pregnancy. Through our case and with the support of the literature, we will insist on the complications that can occur and understand the interest of early diagnosis and management of this entity.

**Keywords:-** Myoma, pregnancy, complications, management.

# I. INTRODUCTION

Myoma is the most common pelvic tumor in pregnancy with an incidence of 0.5 to 5% of all pregnancies combined [1].

The effects of myomas on pregnancy and delivery as well as their management, especially in case of caesarean section, remain controversial more than 100 years after Victor Bonney's first description of a per caesarean myomectomy [2]. Myomectomy during caesarean section is a controversial attitude and strongly discouraged because of the risk of uncontrollable bleeding. However, most obstetricians are trained to perform myomectomy only if it is small and pedicled. [3].

# II. OBSERVATION

Mrs. F. S. aged 45 years, with no notable pathological history, multiparous (G5P4). Followed by a general practitioner for a uterine myoma of 9 cm. Consulted at CHU HASSAN II FES at 21 weeks of amenorrhea and one day for follow-up and delivery modalities. The clinical examination was unremarkable. The patient remained under clinical, biological and radiological surveillance.

The third trimester ultrasound at thirty-five weeks of amenorrhea and two days showed a homogeneous hypoechoic isthmic image measuring 12\*10 cm with peripheral vascularization suggesting an interstitial myoma previa (Fig1 and 2). Moreover, the pregnancy was monofetal and evolving in breech presentation, the posterior placenta low inserted type II-III of grannum opposite the myoma, the amniotic fluid of normal quantity and the fetal weight estimated at 1958 g. The case was staffed and the decision was to deliver by scheduled cesarean section at thirty-nine weeks of amenorrhea for myoma previa.

An obstetrical ultrasound was redone on the day of programming at 39 weeks of amenorrhoea and showed the same characteristics of the myoma associated with a pregnancy whose fetal weight was re-evaluated at 2856g. During the exploration, an anterior isthmic myoma was discovered with a diameter of 13\*12 cm (fig3) and a newborn was extracted, female, apgar 10/10 at the 1st and at the 5th minute, weighing 2900g. The decision was to perform a myomectomy at a distance from the cesarean section.



Fig. 1: Myome interstitiel praevia



Fig. 2: Myome interstitiel praevia faisant 12.85\*10.76cm

The postoperative course was unremarkable, in particular no postpartum hemorrhage. No therapeutic procedure on the myoma was performed during the caesarean section.

An ultrasound scan was planned in 3 months after delivery to check the isthmic myoma and for possible programming of myomectomy.



Fig. 3: l'exploration per opératoire montre un myome isthmique antérieur

### III. DISCUSSION

The prevalence of uterine myoma in pregnancy varies between 3 and 13% depending on the study. [4,5,6]. This prevalence is increased when the maternal age exceeds 35 years. [7,8]. This was the case for our patient who was 44 years

The size of our patient's myoma was 12x10 cm, which is quite close to the size reported in the literature [8]. However, a larger size of up to 18x23 cm has been reported [9]

Most myomas are asymptomatic. However, about 10-20% complications may occur [10]. Our patient was and remained asymptomatic.

The frequency of spontaneous abortions varies in the literature from 4% to 18% [5]. The location of the myoma must be taken into consideration; sub-mucosal myomas can cause mechanical and vascular endometrial alterations and induce alterations of the stroma such as atrophy or ulceration reducing the chances of placental development. sub-mucosal fibroids opposite the placental insertion increase the risk of intra-uterine growth retardation (IUGR) and retro placental hematoma (RPH)

Cervical or isthmic fibroids may interfere with the ampliation of the lower segment and the accommodation of the presentation: breech or transverse presentations are more frequent.

Delivery haemorrhages affected 7.3% of the population of women with myomatous uteri, compared with 1.8% of the control population in the series by Lopes et al [14]. They are explained by the difficulties of uterine retraction and involution linked to the fibroids. Patients must always be informed of the risks of haemostasis hysterectomy.

Among the fetal complications, no excess mortality has been noted in the majority of published studies. However, some authors report a higher risk of fetal death in utero before 32 weeks' gestation in the case of uterine fibroids. Fetal morbidity is dominated by growth restriction and prematurity [12].

Hui Li et al. in their meta-analysis of 1967 women, 73.1% had a caesarean delivery. The myoma was considered an obstruction to labor in only 5.3% [5]. Our patient had a scheduled cesarean delivery for placenta previa.

In the same series by Hui Li et al, 86.7% had a myomectomy at the same time of surgery [5].

Several studies have shown the feasibility of myomectomy during pregnancy in targeted cases [7]. The use of hysterectomy was 5.3%. [5]. Other authors, on the other hand, propose remote myomectomy with an average interval of 6 weeks after the caesarean section [7].

The recommendations for clinical practice updated in 2011 recognize an increased rate of obstetric complications in case of myomas but do not recommend the practice of myomectomy during pregnancy or at the time of cesarean section, unless it is necessary or justified[13].

# IV. CONCLUSION

In early pregnancy, the risk of spontaneous miscarriage is twice as high with intramural myomas and four times as high with submucosal myomas [11]. Our patient had an interstitial myoma. Women known to have myoma should have close follow-up to improve maternal and fetal prognosis.

#### REFERENCES

- [1.] Rasmussen KL, Knudsen HJ. Effect of uterine fibromas on pregnancy. Ugeskr Laeger. 1994;51:766870.
- [2.] Jauniaux E, Khan KS. Caesarean myomectomy: Victor Bonney reports the first case in 1913. BJOG 2014;121(2):193.
- [3.] Glavind K, Palvio DH, Lauritsen JG. Uterine fibromyoma in pregnancy. Acta Obstet Gynecol Scand. 1990;69:6179.
- [4.] Legendre G, Brun JL, Fernandez H. Place des myomectomies en situation de conception spontanée ou chez la femme désireuse de préserver sa fertilité. J Gynecol Obstet Biol Reprod (Paris) 2011;40:875– 944.
- [5.] HUI LI, JUAN DU, LIANGYI JIN, ZHAN SHI and MINGYING LIU. Myomectomy during cesarean section. Acta Obstetricia et Gynecologica. 2009; 88: 183186.
- [6.] Stout MJ, Odibo AO, Graseck AS, Macones GA, Crane JP, Cahill AG. Leiomyomas at routine second-trimester ultrasound examination and adverse obstetric outcomes. Obstet Gynecol 2010;116:1056–63.
- [7.] Brazet E, A. Ghassani, M. Voglimacci, M. Chalret Du Rieu, P. Berlioux, et O. Parant. Fibrome prævia: une cause rare d'occlusion intestinale aigue en cours de grossesse. Gynécologie Obstétrique & Fertilité (2014),
  - http://dx.doi.org/10.1016/j.gyobfe.2014.09.012.
- [8.] Eun Seo Shin, Hye Sim Kang. Case of suspected torsion and amputation of myoma during pregnancy; Annals of Medicine and Surgery 71 (2021) 103007.
- [9.] Harissou Adamou , Ibrahim Amadou Magagi , Souleymane Oumarou Garba and Oumarou Habou. Acute intestinal obstruction due to extrinsic compression by previa myoma and ectopic pregnancy: a case report. Journal of Medical Case Reports (2018) 12:10.
- [10.] A.S. Cerdeira, M. Tome, N. Moore, L. Lim, Seeing red degeneration in uterine fibroids in pregnancy: proceed with caution, Lancet 23 (2019), 394(10212):e37.
- [11.] F. Levast, G. Legendre, P.-E. Bouet, L. Sentilhes. Prise en charge des myomes uté rins durant la grossesse. Gyne cologie Obste trique & Fertilite 44 (2016) 350–354.
- [12.] Lai J, Caughey AB, Qidwai GI, Jacoby AF. Neonatal outcomes in women with sonographically identified uterine leiomyomata. J Matern Fetal Neonatal Med 2012;25:710–3.
- [13.] Marret H, Fernandez H, Fritel X, Herbreteau D. Actualisation de la prise en charge des myomes. Recommandations pour la pratique clinique. J Gynecol Obstet Biol Reprod 2011;40:693–962.
- [14.] Lopes P, Thibaud S, Simonnet R et al. Fibromes et grossesse: quels sont les risques? J Gynecol Obstet Biol Reprod 1999; 28:772277.