

DOI: <https://dx.doi.org/10.18203/2320-1770.ijrcog20240141>

Case Series

## Uterine fibroid delivered through the cervix: diagnostic and therapeutic management about 23 cases collected at Yopougon teaching hospital, Abidjan, Côte d'Ivoire

Koffi Abdoul Koffi<sup>1\*</sup>, Kacou Edele Aka<sup>1</sup>, Ana Toure-Ecra<sup>1</sup>, Assane Landry Brou<sup>2</sup>, Arnold Gomez Zoua<sup>2</sup>, N'guessan Luc Olou<sup>3</sup>

<sup>1</sup>Department of Gynecology and Obstetric, University Felix Houphouet Boigny, Yopougon teaching hospital, Abidjan Côte d'Ivoire

<sup>2</sup>Yopougon Teaching hospital, Abidjan Côte d'Ivoire

<sup>3</sup>Department of Gynecology and obstetric, Yopougon teaching hospital, university Houphouet Boigny, Abidjan Côte d'Ivoire

**Received:** 24 October 2023

**Accepted:** 04 January 2024

### \*Correspondence:

Dr. Koffi Abdoul Koffi,

E-mail: [kkoffiabdoul@yahoo.fr](mailto:kkoffiabdoul@yahoo.fr)

**Copyright:** © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

### ABSTRACT

Uterine leiomyomas or fibromyomas, more commonly known as fibroid are the most common tumours of the female reproductive tract. Sometimes a submucosal leiomyoma may become pedunculated and progressively externalize from the uterine cavity, causing increased uterine irritability, metrorrhagia and anaemia, pelvic pain and heaviness, and perception of a vaginal mass. Prevalence of this clinical form is rare. We report our experience of taking a series of twenty-three patients, which objectives was contributed to improvement of management of uterine fibroids. We reported our observation in the epidemiological, clinical and therapeutic aspects of cervical delivered forms. It took place from November 2017 to November 2021. These were housewives with an average age of 41.30 years (27-56 years). 63.61% of whom were over 40 years old, the majority of whom were pauciparous (45.46%) with an average parity of 2.91. Nulliparous women accounted for 18.18% of the total. The average duration of the disease was 7.56 months and could reach 48 months. The reason for consultation was dominated by anaemia with 77.27%. The fibroids varied in size (mean 7 cm) and sometimes exceeded 15 cm. Transfusion of concentrated red blood cells was almost constant (88.24%). Surgical treatment was myomectomy by twisting with 53.33% followed by hysterectomy in 26.67%. Management of fibroma delivered through the cervix were anemia frequently requiring a prior blood transfusion. Treatment remains surgery. Informing and educating patients about early consultation would improve the morbidity associated with this condition.

**Keywords:** Uterine fibroid, Anemia, Myomectomy

### INTRODUCTION

Leiomyomas or uterine fibromyomas are the most common tumors of the female genital tract. They affect 20-40% of women of childbearing age and are 3-9 times more common in black women than in white women.<sup>1-3</sup> Submucosal myomas account for about 5% of all uterine myomas.<sup>1,3</sup> They are much more likely to cause heavy bleeding and severe anemia. Sometimes a submucosal

leiomyoma can become pedunculated and gradually externalize out of the uterine cavity.<sup>4,5</sup> Clinical cases are reported by practitioners around the world including different therapeutic approaches. In Côte d'Ivoire, we reported in 2013 in a retrospective study that uterine fibroid surgery accounted for more than half of scheduled gynecological surgical activities (53.65%), including 46% myomectomy and 54% hysterectomy by laparotomy in our practice.<sup>6</sup> Having observed the frequent appearance.

## CASE SERIES

We present a summary of twenty-three clinical cases. It was a retrospective and prospective report cases based on the analysis of the medical records of the patients who

presented with uterine leiomyoma delivered through the cervix between November 2017 and November 2021 in the gynecology-obstetrics department at Yopougon university hospital. Their characteristics are summarized in the Table.

**Table 1: General characteristics and clinical-therapeutic aspects of patients.**

Patient	Age (In years)	Parity	Reason for consultation	Pathlogy duration (Month)	Fibroid size (cm)	Level (Hb/dl)	Type of surgery	Blood transfusion	Duration of hospital stays (days)
P1	41	2	Anemia	07	5×4	3.6	HYST/L	Yes	10
P2	50	6	VM	06	5×4	6.3	HYST/V	Yes	11
P3	45	4	Anaemia	03	6×6	8.23	MYOM	Yes	06
P4	28	3	An/ VM	05	6×5	7.1	MYOM	Yes	03
P5	56	3	Anaemia	05	4×4	9.2	TWS	No	02
P6	36	3	Anaemia	04	5×5	5.8	TWS	Yes	03
P7	43	0	Anaemia	03	6×6	7.7	MYOM	Yes	06
P8	54	6	VM	05	7×7	7.9	HYST/L	Yes	04
P9	54	3	Anaemia	24	15×12	3.7	HYST/L	Yes	13
P10	44	2	Anaemia	48	10×8	6	TWS	Yes	9
P11	27	2	VM	05	7×7	5.1	TWS	Yes	7
P12	43	3	VM/ An	03	8×6	04	MYOM	Yes	8
P13	44	3	An	05	8×8	4.7	HYST/L	Yes	10
P14	29	2	An/ VM	09	5×5	3.6	TWS	Yes	5
P15	29	1	VM	02	4×4	9.5	TWS	No	05
P16	44	1	AN	06	9×3	6.8	MYOM	Yes	05
P17	40	4	An/VM	03	12×10	6.5	MYOM	Yes	02
P18	44	9	Anaemia	08	10×9	5.4	MYOM	Yes	13
P19	30	0	VM	06	5×5	7.2	MYOM	Yes	2
P20	46	1	Anaemia	4	6×6	8.5	MYOM	Yes	02
P21	43	0	An/VM	03	5×4	4.9	MYOM	Yes	6
P22	41	6	VM	04	12×12	8	HYST/V	Yes	4
P23	39	3	An/ VM	06	4×4	4.92	TWS	Yes	5
<b>Average</b>	41.30	2.91		7.56	07	6.28			6.13

P: Patiente, An: Anaemia, VM: vaginal mass, MYOM: myomectomy, TWS: twisting, HYST/L: Hystérectomy Laparotomye, HYST/V: Hystérectomy vaginal, Hb: Haemoglobin.

These were housewives with no fixed income whose average age was 41.30 years with extremes of 27 and 56 years. The maximum frequency was found in age group over 40 years or 63.61%. They were mostly pauciparous (45.46%). Average parity was 2.91. Nulliparous accounted for 18.18%.

Duration of evolution was on average 7.56 months waiting forty eighth months. Reason of consultation was dominated by anemia with 77.27%. Fibroids of varying size (average 7 cm) have been observed that can exceed 15 cm in necrotic appearance (Figure 5). 88.24% of patients received red blood cell concentrate transfusion.

Surgical treatment was dominated by scalpel myomectomy with 53.33% followed by hysterectomy n 46.67%. Surgical procedure is described as follows-After clinical examination, we performed an ultrasound to look for other associated myomas and insertion base of nucleus.

Type of surgical procedure is decided after clinical and paraclinical examination. Diameter of fibroid was measured using a tape measure post-operatively (Figure 1). Surgical procedure performed was either a vaginal myomectomy (by simple scalping or removal by electric scalpel fragmentation or excision by pedicle section) or hysterectomy performed under loco-regional or general anesthesia under usual aseptic conditions. Associated myomas in young women desiring maternity were subject to preferential myomectomy by laparotomy later.

### Description of the technique used

In gynecological position, myoma was seized using Pozzi forceps under vision (Figure 2) and twisted clockwise around her pedicle (scalping). In some cases, where possible, the pedicle was tightened and tied as high as possible. When the insertion base appears wider and the scalping was difficult, resection at the lowest of myoma is

performed with an electric scalpel, also ensuring complementary hemostasis (Figure 3 and 4). Sometimes a sterile compress pad was left in the uterine cavity in contact with the resection area and is removed 24 hours after procedure. However, for large necrotic myomas obstructing vagina and whose access to base is impossible, a first fragmentation by hemi-section with electric scalpel and or scissors was carried out. Myomectomies have been successfully performed.

Total hysterectomy with or without preservation of the ovaries was performed abdominally or vaginally in case of associated pathology (Figure 5) according to the usual techniques. In certain circumstances, we make a first incision of the uterine fundus allowing access to base of the myoma in uterine cavity. It is then extracted from genital tract facilitating rest of surgery. The immediate and late operative follow-up (4 to 6 weeks later) was simple.



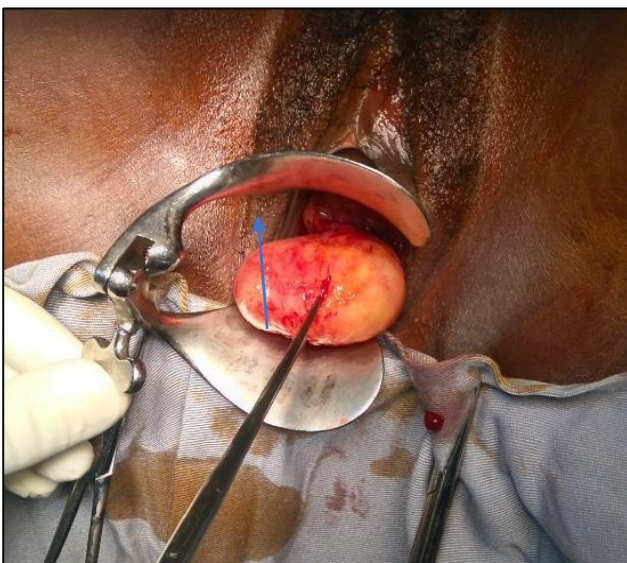
**Figure 3: Electric scalpel section.**



**Figure 1: Measurement of myoma.**



**Photo 4: Myoma.**



**Figure 2: Gripping of the fibroid for scalping.**



**Figure 5: Fibroid given birth complicated by uterine prolapse requiring vaginal hysterectomy.**

## DISCUSSION

Uterine leiomyomas are the most common tumors of reproductive tract in women of childbearing age.<sup>1,2</sup> Although most myomas are considered asymptomatic, 20-50% produce symptoms that include menorrhagia, pelvic pain or pressure, infertility, recurrent pregnancy loss.<sup>1,2</sup>

Hospitalization rates of uterine fibroid patients in the United States increased steadily by age until peaking in women aged 45 to 49 years (6.3 per 1,000 person-years), then decreased in women aged 50 to 54 years (3.2 per 1,000 person-years). The costs reached nearly \$9.4 billion in annual health care costs in the United States.<sup>2</sup>

Our patients had an average age of 41.30 years with extremes of 27 and 56 years. Out of 202,538 patients aged 20-50 years in a tertiary care centre in North India in the last 10 years, 69,328 (34.22%) had a myomatous uterus.<sup>7</sup> These forms of submucosal myomas prolating in the vagina or externally through the cervix are rare and their frequency difficult to estimate. For women over 50, it was a longer duration of evolution, the sudden expulsion of myoma motivated earlier consultations in emergency.

Main reason of consultation was anemia. It was a chronic anemia that after massive bleeding decompensated and motivated emergency admission. Anemia is a common complication of these fibroids. Literature Didn't report a series of cases. These are rare cases whose emergency admission is related to externalization of a necrotic mass sometimes infected.<sup>7-9</sup> In our practice, rarely was appearance of mass, reason of consultation. Common symptoms are dominated by bleeding, anemia, mild abdominal pain to a lesser degree, constipation, urinary signs or infertility.<sup>7</sup>

These are patients sometimes from disadvantaged backgrounds, illiterate who use traditional pharmacopoeia for long-term care, hence chronic and deep anemia with an average hemoglobin level of 6.28 g/dl. Average duration of consultation from onset of first symptoms (sometimes neglected) to the consultation period was seven months. It was difficult to assess because symptoms are sometimes overlooked or unknown to patients. This delay was all longer, if the mass is small or remains in vaginal cavity, its externalization can accelerate consultation. clinical appearance of prolapsed myoma is variable. The largest (exceeding 10 cm in diameter) were associated with necrosis. This was accompanied by fetid vaginal discharge.<sup>8,10</sup> Other practitioners reported cases of association with uterine reversal especially in the immediate postpartum period.<sup>9</sup> Sometimes, macroscopic aspect of necrotic-hemorrhagic appearance suggested carcinomatous degeneration but histological examination revealed leiomyoma.

Its clinical aspect guides the treatment. In the majority of clinical cases found in literature, vaginal myomectomy under general or loco-regional anesthesia was

performed.<sup>3,8,10</sup> However, preference for vaginal ablation or hysterectomy in patients with pedunculated submucosal leiomyoma depends on several factors. There is an association between patient characteristics and therapeutic choice; age, parity, lower preoperative hematocrit and hemoglobin levels, myoma diameter and volume with the existence of associated myoma and their incidence.<sup>5,7</sup>

In Turkey, Serdar Aydin reported clinical factors predictive of vaginal myomectomy success for these fibroids.<sup>5</sup> Feasibility and choice of vaginal ablation or hysterectomy depend on many factors: absence of coexistence of other myomas, largest volume of the lower pole of externalized myoma estimated by ultrasound measurement, and more severe anemia, a sign of less stable hemodynamics, were associated with preference for vaginal myoma removal.

In cases of single myoma, vaginal myomectomy is a feasible, easy and effective procedure, even for huge leiomyomas.<sup>8</sup> We have performed for the majority of patients a vaginal myomectomy either by simple scalping, or resection with an electric scalpel when base appears wide. Large necrotic myomas must have required fragmentation. The decision of myomectomy (scalping) absolutely did not take into account age, parity. For an isolated pedunculated myoma regardless of age, vaginal ablation was performed, because it was easy to perform for our patients weakened by chronic anemia.

Unless there are other indications requiring hysterectomy, vaginal myomectomy is the most satisfactory treatment for prolapsed submucosal myoma for patients of childbearing potential who wish to preserve fertility. It is a fast and safe procedure, with reduced uptime and reduced anesthetic exposure.<sup>4,11-14</sup> Combination of other interstitial myomas was subject of scheduled surgery after correction of anemia. This was also the attitude of other practitioners. For other authors, ultrasound also made it possible to assess the diameter of the myoma pedicle. This helped in making a hysterectomy decision.<sup>5,12</sup>

Laparotomy hysterectomies were reserved for women over 40 years, with multiple large associated myomas or uterine prolapse. Vaginal route was reserved for smaller uterus than twelve centimeter (associated myoma) or with prolapse. In the series of thirty five cases published by Serdar Aydin a hysterectomy had involved fourteen patients but it was related to other factors, in particular the uterine prolapse that accompanied these myomas as well as in USA.<sup>5,15,16</sup> Long hospital stay was correlated with anemia and difficulties in availability of blood products for rapid correction of this anemia

## CONCLUSION

Management of myomas given birth were anemia frequently requiring a prior blood transfusion. Treatment remains surgery. Informing and educating patients about

early consultation would improve the morbidity associated with this condition.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: Not required*

## REFERENCES

1. Fernandez H, Chabbert BN, Allouche S. Prévalence du fibrome utérin en France et impact sur la qualité de vie à partir d'une enquête menée auprès de 2500 femmes de 30-55 ans. *J Gynecol Obstet Biol Reproduct.* 2014;43(9):721-7.
2. Lauren A. Wise, and Shannon K. Laughlin-Tommaso. Epidemiology of Uterine Fibroids-From Menarche to Menopause. *Clin Obstet Gynecol.* 2016;59(1):2-24.
3. Jaouad K, Youssef B, Hanane R, Driss M, Mohamed D. Huge prolapsed cervical myoma mimicking cystocele. *Saudi J Health Sci* 2015;4(2):135-7.
4. Kadir G, Selen S, Yildiz AT, Murat N, Fahrettin K. The management of an unusually sited isthmocervical leiomyoma and a huge prolapsed pedunculated submucous leiomyoma. *Gynecol Surg.* 2005;2:35-8.
5. Serdar A, Hale GÇ, Mustafa M, Rabia ZB. Clinical predictors of successful vaginal myomectomy for prolapsed pedunculated uterine leiomyoma. *J Turk Ger Gynecol Assoc.* 2018;19(3):146-50.
6. Koffi A, Olou NL, Minata F, Séni K, Horo A, Touré-Ecra AF. Chirurgie du fibrome utérin, bilan dec cinq années d'activités au service de gynécologie du CHU de Yopougon Abidjan. *Rev int Sc Med.* 2013;15(2):95-9.
7. Nirmala D, Daya S. Uterine myomas revisited. *Eur J Obstet Gynecol Reproduct Biol.* 2010;152(2):119-25.
8. Bezircioglu I, Sakarya DK, Yetimlar MH, Kayhan E, Yildiz A et al. A Huge Vaginal Prolapsed Pedunculated Uterine Leiomyoma: A Case Report. *J Clin Stud Med Case Rep.* 2015;2:005.
9. Elie N, Clifford-Ebontane E, Nadège NA. Puerperal vaginal prolapse of a huge pedunculated submucosal uterine fibroid that was initially intramural-A case report. *J Med Res.* 2016;2(2):28-9.
10. Stott D, Zakaria M. The transcervical expulsion of a large fibroid. *BMJ Case Rep.* 2012;bcr0120125523.
11. Ikechebelou JI, Eleje GU, Okpala BC, Onyiaorah IV, Umeobika JC, Onyegbule OA et al. Vaginal myomectomy of a prolapsed gangrenous cervical leiomyoma. *Niger J Clin Pract.* 2012;15(3):358-60.
12. Kovachev E. A case report of an enormous prolapsed pedunculated submucous myoma. *Scripta Sci Medica.* 2011;43(1):21-2.
13. Mikitaka O, Yuko H, Yasushi S. Vaginal Myomectomy for Semi pedunculated Cervical Myoma during Pregnancy. *Am J Perinatol Rep.* 2014;4(1):37-40.
14. Benedito BS, Joao PSS, Pedro VLC. Huge Prolapsed Pedunculated Necrotizing Submucosal Leiomyoma. *J Minim Invasive Gynecol.* 2018;25(7):1128-9.
15. Nilgun T, Serap S, Ikbak K, Burcu K. Totally inverted cervix due to a huge prolapsed cervical myoma simulating chronic non-puerperal uterine inversion. *Int J Surg Case Rep.* 2014;5(8):513-5.
16. Newton BW, Harmanli O. Perplexing presentation of uterine prolapse and a prolapsed pedunculated leiomyoma. *Am J Obstet Gynecol.* 2016;215(6):799.e1-2.

**Cite this article as:** Koffi KA, Aka KE, Toure-Ecra A, Brou AL, Zoua AG, Olou NL. Uterine fibroid delivered through the cervix: diagnostic and therapeutic management about 23 cases collected at Yopougon teaching hospital, Abidjan, Côte d'Ivoire. *Int J Reprod Contracept Obstet Gynecol* 2024;13:404-8.