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Epidemio-Clinical and Therapeutic Aspects of Uterine Fibroma at Fousseyni Daou Hospital in Kayes

Dembele, S[1], Diassana, M[1], Macalou, B[1], Sidibe, A[2], Hamidou, A[2], Doumbia, F[1], Haidara, M[3], Kane, F[4], Sylla, C[5], Bocoum, A[5], Traore, S[6]

[1]Department of Gynecology and Obstetrics of the Fousseyni Daou Hospital in Kayes, CHMG+955, Kayes, Mali
[2]Kayes Reference Health Centre, Mali
[3]Kalaban-Coro Reference Health Centre, Mali
[4]Bla Reference Health Centre, Mali
[5]Department of Gynecology and Obstetrics at the CHU Gabriel Toure, Ave Al Quds, Bamako, Mali
[6]Department of Gynecology and Obstetrics of the Regional Hospital of Sikasso, Unnamed Road, Mali

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***Corresponding author:** Dembele, S
Department of Gynecology and Obstetrics of the Fousseyni Daou Hospital in Kayes, CHMG+955, Kayes, Mali

Abstract **Original Research Article**

Introduction: Leiomyoma, commonly called fibroma, is a benign tumor most common in women of childbearing age. The aim was to study the epidemio-clinical and therapeutic aspects of uterine fibroma at the FOUSSEYNI DAOU in KAYES hospital. ***Materials and methods*:** This was a cross-sectional descriptive study with prospective data collection in the obstetric gynecology departement of the FOUSSEYNI DAOU in KAYES hospital from January 01, 2019 to June 30, 2020. The study involved all the patients in whom the clinical and paraclinical diagnosis of uterine fibroma had been made and whose management had been carried out in the departement. All patients admitted to the departement for other reasons were excluded from this study. ***Results*:** During the study period we collected 40 cases of uterinefibroma out of a total of 4644 gynecology consultations of 0.86%. The most represented age group was 20-34 years old. Pelvic pain, desire for pregnancy (sterility) and genital hemorrhage were the most common reasons for consultation with the respective frequencies of 35%, 35% and 17.5%. The diagnosis of uterine fibroma was confirmed on ultrasound in 100% of patients. No treatement was observed in 25% of patients, medical treatment was performed in 17.5% of patients, myomectomy was performed in 45% of patients and hysterectomy in 12.5% of patients. The postoperative course was complicated in 47.83 % of patients. No case of death was observed. No case of death was observed. ***Conclusion*:** Uterine fibroid is a relatively common pathology in our department, its frequency has been estimated at 0.86%. It mainly affects the 20-34 age group.

Keywords: Aspects, Epidemio-clinical, Therapeutic, Uterine, fibroma, Hospital, Kayes.

INTRODUCTION

Leiomyoma, commonly known as fibroids, is a benign tumor, most common in women of childbearing age [3]. It is formed by a proliferation of connective cells called fibroblasts, to which collagen fibers, which are proteins, are added [1]. Of all the possible locations, it is at the level of the uterus that the fibroid is the most frequent: it represents 1/5 of the affections of this organ in the white race and 1/3 in the black race [1]. There is a clear family predisposition in black women, they develop earlier and are often large. They are isolated or multiple and can be interstitial, subserous, or submucosal, sessile or pedunculated. They are usually corporeal and rarely cervical localized. Their size can range from a grain of rice to that of a full-term pregnancy. The intimate mechanism of fibroid formation is poorly understood, the promoter role of estrogens (hyperoestrogenia) on tumor growth is admitted. This notion of hormonal terrain explains why uterine fibroids are more frequent [6]:

- In obese people (peripheral automation of androgens to estrogens in adipocytes).
- In all women with dysovulations with luteal insufficiency and breast dystrophy and especially during the pre-menopausal phase, especially since it is long.

The risk of malignant degeneration is very low (about 0.5%) and still not accepted by all clinicians, to be kept in mind for therapeutic indications [6]. Fibromyomas are benign tumors whose mere presence does not warrant treatment, especially if it must be

aggressive or mutilating [7]. Therapeutic indications arise only because of complications related to the fibroid itself [7]. These complications can be mechanical by compression, trophic with edematous degeneration, aseptic necrobiosis, but also sterility. In these cases, treatment can only be myomectomy or hysterectomy. The other most common complication is genital bleeding, the only therapy for which is based on hormones, but surgery is necessary if it fails [7]. Given the frequency and lack of data on this condition in our department, we initiated this work to study the epidemio-clinical and therapeutic aspects of uterine fibroids at the FOUSSEYNI DAOU Hospital in Kayes.

MATERIALS AND METHODS

We conducted a cross-sectional descriptive study with prospective data collection in the obstetrics and gynecology department of FOUSSEYNI DAOU Hospital in Kayes from 1 January 2019 to 30 June 2020. The study involved all patients in whom the clinical and paraclinical diagnosis of uterine fibroids had been made and whose management was carried out in the department. All patients admitted to the ward for other reasons were excluded from this study. Data were collected from the outpatient registry, patient medical record and operative report log. Data were entered from Microsoft Office Word and Excel and analyzed from SPSS. Version.20 Ethically informed consent and confidentiality were respected.

RESULTS

During the study period we collected 40 cases of uterine fibroids out of a total of 4644 gynecological consultations, a prevalence of 0.86%. The 20-34 age group was the most represented with a frequency of 57.5%. The median age was 34.37 years. The extreme ages were 24 and 46. 05% of patients had a history of caesarean section. 15% of patients had an irregular menstrual cycle. 05 were on hormonal contraception with estrogen-progestin.

Table I: Distribution of patients by reason for consultation

Reason for consultation	Effectif	%
Desire for pregnancy (Infertility)	14	35,00
Pelvic pain	14	35,00
Dysmenorrhea	01	02,50
Genital bleeding	07	17,50
Spaniomenorrhea	02	05,00
Hydrorrhea	01	02,50
Deterioration of general condition	01	02,50
Total	**40**	**100,00**

Table II: Distribution of patients by type of genital bleeding

Type of bleeding	Effectif	%
Metrorrhagia	03	42,85
Menorrhagia	03	42,85
Menometrorrhagia	01	14,30
Total	**07**	**100,00**

Among the symptoms dysuria was found in 20% of patients and pollakiuria in 20%. 37.7% of patients had constipation, 25% had nausea associated with constipation, and 10% had nausea not associated with other symptoms. The size of the uterus was greater than or equal to 8 weeks of amenorrhea in 62.5% of cases and 25% had uterine tenderness during pelvic touch.

Table III: The distribution of patients according to complementary examinations.

Complementary examinations	Effectif	%
Echography	40	100,00
Hysterosalpingography	11	27,00

Table IV: Distribution of patients according to the location of the uterine fibroid on ultrasound

Localiszation	Effectif	%
Uterine body	36	90,00
Uterine isthmus	02	05,00
Cervix	01	02,50
Body and cervix	01	02,50
Total	**40**	**100,00**

35% of uterine fibroids were subserous, 25% were subserous and submucosal and 17.5% were submucosa. 10% of fibroids were associated with an ovarian cyst, 2.5% with ovarian dystrophy, 2.5% with intrauterine pregnancy, 2.5% with ectopic pregnancy and 2.5% with breast fibrocyst. Medical treatment was carried out in 17.5% of cases, medical and surgical treatment in 57.5% of cases and therapeutic abstention was observed in 25% of cases. Myomectomy was performed in 45% and hysterectomy in 12.5% of patients.

Table V: Distribution of patients according to operative indication

	Indications for operation	**Effectif**	**%**
Myomectomy	Infertility + Uterine Fibroid	11	47,82
	Myoma Compressing Neighboring Organs	02	08,69
	Failure of Medical Treatment / Menometrorrhagia	05	21,73
Hysterectomy	Medical treatment failure+ menometrorrhagia in multiparous	03	13,04
	Giant uterine fibroid more or medium suspicious cervical lesion in elderly patients	02	08,69
Total		**23**	**100,00**

Table VI: Distribution of by number of fibromatous nuclei

Number of nuclei	**Effectif**	**%**
01-05	10	43,47
06-10	06	26,08
11-15	05	21,73
16-20	02	08,69
Total	**23**	**100,00**

Table VII: Distribution of patients according to postoperative period

Post-operative follow-up	**Effectif**	**%**
Single suites	12	52,17
Pelvialgia	03	13,04
Haemorrhage	01	04,34
Endometritis	02	08,60
Anaemia	03	13,04
Thrombophlebitis	02	08,69
Total	**23**	**100**

No deaths were observed during the study period.

DISCUSSION

We collected 40 cases of uterine fibroids on 4644 gynecological consultations during the study period, a prevalence of 0.86%. The 20-34 age group was the most represented with a frequency of 57%. The youngest patient was 24 years old and the oldest was 46 years old and the average age was 34.37 years. TOURE O.D. [14] had found 23 years for the youngest patient and 35 years for the oldest with an average of 35 years. On the other hand, BAYO S. [1] had found 18 years for the youngest patient and 77 years for the oldest with an average of 35 years. For THIERO D. [13] the youngest patient was 21 years old and the oldest 52 years old with an average age of 36 years. Contrary to the BAYO S. study [1], We and the other authors did not observe cases of uterine fibroids in adolescent girls. 10% of our patients were obese, 5% were hypertensive and 2.5% were diabetic. BAYO S. [1] had reported that 28% of patients were obese and somewhat hypertensive, 1.6% had goiter and 0.3% had diabetes; KEITA M. [9] reported 8 cases of obesity and TOURE O.D. [14] reported 3 cases of high blood pressure. The field study according to SEGAY J [14] makes it possible to distinguish the uterine fibroid local expression of a general disease and the uterine fibroid local disease.

The analysis of surgical history can give the incidence of uterine fibroids on:

- Ectopic pregnancy by intrinsic compression on the tubes or by localizations at the utero-tubal junction,
- Pregnancy during childbirth by dynamic dystocia,
- Sterility and premature delivery (35% of our patients had had at least one spontaneous abortion and 14 patients had sterility related to uterine fibroids including 5 cases of secondary sterility),
- The possibility of recurrence of uterine fibroids (5% of our patients had a history of myomectomy).

We recorded 10% of primiparous people who had uterine fibroid, this rate is much lower than that of DUCING J *et al*., [4] who found 72.5%. This difference could be explained by the low contraceptive rate in our

country. In our series 35% of patients had a history of spontaneous abortion compared to 29.80% and 65% respectively for THIERO D [13] and TOURE O.D [14] and 5% of patients had a history of oral contraception, compared to 25% for KEITA M. [9] and 07% for TRAORE M. [15]. Pelvic pain was one of the main reasons for consultation with a frequency of 35%. Our rate varies according to the authors, as well as KOUTOUAN J. [8], RANNEYR. [10], HUIGUI ER. [5] and KEITA M [9] found 33%, 19%, 25% and 76% respectively. These pelvialgia can be a reflection of: intrinsic compression (62.5% of patients had a uterus whose size was greater than or equal to 8 weeks of amenorrhea). BAYO S. [1] had found 171 myomatous nuclei of size varying from a child's head to that of an adult's head, a frequency of 54%. TOURE OD. [14] had found that 35% of patients had a uterus the size of a grapefruit. Dependence of uterine orientation, this compression can result in urinary and digestive disorders. Thus, in our series we observed 37.5% of constipations, on the other hand BAYO S. [1] had reported 27% of digestive disorders mainly to type of constipation.

In 35% of cases the patients had also consulted for desire for pregnancy (sterility). Of these, 22.5% had consulted for primary sterility and 12.5% for secondary sterility. BAYO S. [1] had observed 35% of cases of primary sterility and 18% of cases of secondary sterility, KOUTOUAN J. [8] had found 15.5% of primary sterility and THIERO D. [13] had found 21.6% of primary sterility and 25.4% of secondary sterility. Submucosal fibroids would be for the majority of authors, the cause of this sterility by mechanical obstacle and concomitant lesions of the endometrium. Genital bleeding was also one of the main reasons for consultation with a frequency of 17.5%. It was metrorrhagia in 7.5% of cases, menorrhagia in 7.5% of cases and menometrorrhagia in 2.5% of cases. THIERO D [13], TOURE O.D. [14] and KOUTOUAN J. [8] reported genital bleeding rates of 32.3%, 20%, and 18%, respectively. The menstrual cycle was irregular in 15% of patients. The maximum duration was 60 days with an average of 30 days. TOURE O.D. [14] found that 21% of patients had an irregular cycle and 5% were menopausal. We observed one case of ectopic pregnancy associated with uterine fibroid, a frequency of 2.5%. It was a 36-year-old patient 3rd gesture, 2nd pare with 2 live children without medical and surgical history followed in the department for secondary sterility related to a uterine fibroid. Clinical and paraclinical examinations had confirmed the association of ectopic pregnancy with uterine polymyomatosis. Intraoperatively we found 3 subserous nuclei and an ampullary ectopic pregnancy encysted in the right tube. TOURE O.D. [13] had reported in its series 2% association of ectopic pregnancy and uterine fibroid. Another patient had been hospitalized in the ward for premature rupture of membranes on a 21-week pregnancy of amenorrhea. The ultrasound examination had revealed an endocavitary uterine fibroid measuring 60 by 40 mm. She was caesared at the 34th week of amenorrhea for highly desired pregnancy in a context of premature rupture of membranes associated with uterine fibroid. In per-caesarean section we found a fundic endocavitary uterine fibroid. The combination of uterine fibroid and ovarian cyst was found in 10% of our patients against 12.12% in KOUTOUAN J. [8]. In our series 37.5% of patients had a uterus whose size was less than 8 weeks of amenorrhea and 62.5% had a uterus whose size was greater than or equal to 8 weeks of amenorrhea. All patients (100%) had undergone ultrasound for confirmation of diagnosis. In our series 90% of uterine fibroids were corporeal, BAYO S. [1] reported the same frequency in his study, but THIERO D. [13] and SANGARE T *et al*., [11] reported a frequency of 84.5% and 67%, respectively. 5% of our patients had a fibroid whose location was isthmic. Our rate is close to that of TOURE OD. [14] which had found a frequency of 6%. We encountered a single case of uterine fibroid of cervical localization, a frequency of 2.5% identical to those reported by TOURE OD. [13], KEITA M. [9] and BAYO S. [1], thus showing the rarity of this type of uterine fibroid. In our series we observed that 17.5% of uterine fibroids were under mucosal including 5% endocavitary, this frequency is lower than that reported by KEITA M. [9] found 28.75% of uterine fibroids including 11.82 endocavitary. 10% of patients had uterine fibroids located at the myometrium level and 25% were localized at the level of the subserous and submucosal layers of the uterus. The number of myomatous nuclei ranged from 1 to 17. Thus we recorded 21.3% of solitary nuclei and 78.26% of multiple nuclei, on the other hand TOURE OD. [14] reported that 32% of patients had a solitary nucleus and 68% had multiple nuclei and BOURY H. [2] noted that 35% of patients had a solitary nucleus. Hysterosalpingography had been performed in 27% of our patients as part of the association of uterine fibroids and sterility to assess the condition of the uterine cavity as well as the patency of the fallopian tubes. In our series we observed therapeutic abstention in 25% of patients. These were asymptomatic uterine fibroids that were discovered incidentally on ultrasound and had no impact on fertility. It should be noted that the authors are unanimous that in case of therapeutic abstention, it is necessary to be sure of the diagnosis, to be sure that there is no endocavitary uterine fibroid and to see the patient once a year for monitoring. Medical treatment based on clinical symptom was performed in 17.5% of our patients. This treatment was based on hormone (progestin), nonsteroidal anti-inflammatory drug, analgesic, antibiotic, antianemic and transfusion. Surgical treatment was performed in 57.5% of patients. At surgical treatment was specific according to age, desire or not for pregnancy, number and dimensions, severity and control of genital hemorrhage. Thus we performed a myomectomy or polymyomectomy in 45% of cases. KOUTOUAN J. [8] had performed 17.5%

myomectomy and THIERO D. [13] had performed myomectomy or polymyomectomy in 37.5% of cases. Myomectomy mainly concerned young patients in the context of the association uterine fibroid and sterility in 47.82% of cases, myoma compressing the neighboring organs in 8.69% of cases and failure of medical treatment and or menometrorrhagia in 21.73% of cases. We performed hysterectomy in 12.5% of patients. This was total or subtotal hysterectomy for failure of medical treatment. Inter-annunnexial total hysterectomy was performed in 5% of patients and inter-annunnexial subtotal hysterectomy was performed in 7.5% of patients. KEITA M. [9] performed total hysterectomy in 9.25% of patients and subtotal hysterectomy in 16.66% of patients and TRAORE M. [15] performed total hysterectomy in 22% of patients and subtotal hysterectomy in 24% of patients. Our hysterectomy rate is lower than those of these different authors, this difference could be explained by the high rate of desire for pregnancy which was 35% in a context of sterility. The postoperative follow-up in our series was marked by pelvial pain in 13.04%, hemorrhage in 04.34%, postoperative anemia in 13.04% of thrombophlebitis in 08.69% of cases and endometritis in 08.69% of cases. On the other hand TOURE OD. [14] had one case of postoperative anemia and one case of postoperative hemorrhage and TRAORE M. [15] reported two cases of postoperative peritonitis and one case of parietal speculation. In our series no deaths were recorded during the study period, but TOURE OD. [14] and TRAORE M. [15] each reported one case of death in their studies.

CONCLUSION

Uterine fibroid is a gynecological pathology that exists in our service. Its frequency was estimated at 0.86% compared to all gynecological consultations. This pathology mainly concerns the 20-34 age group. The main reasons for consultation were pelvic pain in 35% of cases, sterility in 35% of cases and genital bleeding in 17.5% of cases. The diagnosis was confirmed in 100% of cases on ultrasound. Therapeutic abstention was observed in 25% of the patients, the medical treatment was carried out in 17.5% of the patients. The diagnosis was confirmed in 100% of cases on ultrasound. Therapeutic abstention was observed in 25% of the patients, the medical treatment was carried out in 17.5% of the patients.

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