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Research Article

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Uterine Fibroids in the Yaoundé Central Hospital: Epidemiological, Clinical and Therapeutic aspects

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Abstract

Uterine fibroids are the most frequent benign tumours in women in general. This frequency is even higher in the African context given that the black race is a recognised risk factor. Given the raised frequency, uterine fibroids pose a major public health problem in Africa in general and especially in Cameroon. Data concerning uterine fibroids in Cameroon are not only sparse but also obsolete.

The main objective of this study was to describe the epidemiological, clinical and therapeutic aspects of uterine fibroids in the Gynaecological and Obstetric Unit of the Yaounde Central Hospital. To attain this objective, we carried out a cross sectional descriptive study in the Yaounde Central Hospital over a period of 6 months. Data collection was done retrospectively over a period of 5 years from the 1st of January 2013 to the 31st December 2018.

We recruited a total of 250 cases of uterine fibroids among 3512 cases of gynaecological hospitalisation giving a frequency of 14%, the median age was 37.47, majority of the patients were housewives (36%); 51% were nullipara, obesity was present in 28.8% of the cases; the most common symptom was vaginal bleeding (61%); 195/250 (78%) of the cases were managed surgically, 85% of cases received a blood transfusion; post operative complications were observed in 12.8% of cases and 2 cases of death due to anaemia.

In conclusion, uterine fibroids are a common pathology in our context. It is found mostly in younger women. Ultrasound is the main paraclinical test necessary for diagnosis. Management is most often surgical and is sometimes marred by complications and even death. Emphasis should be placed on preventives measures like the fight against modifiable risk factors such as obesity; by encouraging women to indulge in regular physical activity.

Keywords: Blood transfusion; Genital bleeding; Hysterectomy, Uterine fibroids; Yaoundé

Introduction

A fibroid is a benign tumour formed by the over proliferation of connective tissue and smooth muscle fibers, to which collagen a complex protein is adjoined. Of all the possible localisations, its organ of predilection is the uterus. It evolves gradually during the reproductive years of the woman's life and its pathogenesis

is not clear. Epidemiologically, uterine fibroids occur in 25-30% of women aged more than 35 years, in 40% of women above 40 years and in 50 % of women older than 50 years [1]. Recent cross sectional studies have shown that the risk of a woman aged above 45 years of developing fibroids is 60%. [2]. The incidence is higher in black than in Caucasian women. The etiology of fibroids is still very bleak and molecular biology is yet to explain many aspects about them. Their growth is strongly influenced by the female ovarian steroid hormones oestrogen and progesterone, growth

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factors, angiogenetic factors and the process of apoptosis. Black race, heredity, obesity, diabetes and hypertension are all associated with an increased risk of developing fibroids [2].

Clinically, symptoms are apparent in only about 50% of cases [1]. There is proof that specific clinical pictures are present in patients with a strong familial predisposition compared to other patients [2]. Menometrorrhagia is the commonest symptom associated to fibroids. Fibroids could also present clinically with pelvic discomfort, dysmenorrhoea or even mechanical compressive symptoms in the urinary and digestive tracts. In some cases, fibroids have also been found to be at the origin of infertility [3]. Concerning their management, fibroids represent the first cause of hysterectomy for benign lesions in women of reproductive age and around perimenopause [4].

It is given its high frequency in our local setting that we sought out to carry out this study on the sociodemographic characteristics of uterine factors; more specifically, their ethnic factors, their clinical presentation as well as the therapeutic aspects concerning uterine fibroids in the gynaecology unit of the Yaounde Central Hospital

• Objectives

• General Objective :

To describe the epidemiological, clinical and therapeutic aspects of uterine fibroids in the Obstetrics and Gynaecology Unit of the Yaounde Central Hospital (YCH).

• Specific Objectives:

- Determine the frequency of uterine fibroids in the YCH
- Study the sociodemographic, obstetrical and anthropometric characteristics of patients presenting with uterine fibroids in the YCH;
- Describe the clinical characteristics of patients presenting with fibroids;

- Describe management options of uterine fibroids in the YCH.

Materials and Methods

Study Design : We carried out a cross sectional descriptive study with a retrospective collection of data.

Setting : Our study was carried out in the gynaecology service of the YCH. This service has 58 beds, a general delivery ward, a private individual ward, a surgical theatre, a unit for follow up of pregnant HIV infected women and an external consultation unit (obstetrics and gynaecology, antenatal, post natal and family planning unit).

Study Period : Our study covered a period of 5 years from the 1st of January 2013 to the 31st of December 2018.

Study Population : The target population were all the women who came consulting in the gynaecology unit of the YCH during the study period. We included the files of women presenting with uterine fibroids and then excluded all incomplete and unexploitable files.

Data Collection and analysis : Data collection was done using a pretested questionnaire that was formulated for the study. The data was analysed using Epi info version 3.5.3 and SPSS version 20 softwares. Tables were generated using Excel 2007 software.

Results

Frequency : During our study period from 2013 to 2018, we registered 3512 hospitalisation cases in the gynaecology service; 250 of which were cases of uterine fibroids giving a frequency of 14%.

Sociodemographic, Obstetrical and anthropometric characteristics : The median age of the patients was 37.47 and the most represented age group was the 30-40 years age group with a frequency of 47.6%. Most of the women were housewives 36%. Majority were nullipara (51%) and the obese represented 28.8% (Table 1).

Characteristics		Number (n)	Frequency %
		N=250	
Age	< 30	41	16.4%
	30-40	119	47.6%
	>40	90	3.6%
Profession	Public Service	64	25.6%
	Private Sector	23	9.2%
	Informal Sector	55	2.2%
	Student	18	7.2%
Parity	Housewife	90	36.0%
	Nullipara	127	51.0%
	Primipara	64	25.6%
	Multipara	59	23.4%

Obesity	Yes	72	28.8%
BMI \geq 30 Kgs/m ²	No	178	71.2%

Note: BMI : Body Mass Index.

Table 1: Distribution of cases with respect to their Sociodemographic, Obstetrical and anthropometric characteristics.

Clinical Characteristics

Symptoms : Menorrhagia was the most frequent type of genital bleeding. Pelvic pain was present in 40% of cases. Signs of local compression like constipation and pollakiuria were present in 34.4% and 31.6% of cases respectively (**Table 2**).

Symptoms	-	-	Number(n)	Frequency %
	-	-	N=250	-
Genital	Yes	-	152	61.0%
Bleeding	-	Menorrhagia	86	56.5%
	-	Meno-metrorragies	50	32.8%
	-	Metrorragia	16	10.7%
	No	-	98	39.0%
Pelvic pain	Yes	-	100	40.0%
	No	-	150	60.0%
Dysmenorrhoea	Yes	-	80	32.0%
	No	-	170	68.0%
Constipation	Yes	-	86	34.4%
	No	-	164	65.6%
Pollakiuria	Yes	-	79	31.6%
	No	-	171	68.4%
Sensation of pelvic mass	Yes	-	20	8.0%
	No	-	230	92.0%

Table 2: Distribution of cases with respect to symptoms.

Diagnosis : From the histological point of view, there were multiple fibroids in most of the cases (**Table 3**). Fibroids which developed in the abdomino pelvic cavity were found in half of the cases (**Table 4,5**). Concerning the layer of the uterus involved as shown by ultrasound, majority of the fibroids were interstitial.

Distribution of cases with respect to the number of fibroids

Number of fibroids	Number (n)	Percentage (%)
Solitary	33	13.2%
Multiple	217	86.8%
Total	250	100.0%

Table 3: Distribution of cases with respect to number of fibroids.

Developpement of fibroids

Developpement of fibroids	Number(n) N=250	Frequency (%)
Pelvic	119	47.6%
Abdomino-pelvic	125	50.0%
Unprecised	6	2.4%

Table 4: Distribution of cases with respect to the development of the fibroids.

Location of fibroids on ultrasound in the different layers of the uterus.

Layer of the uterus	Number (n) N=250	Frequency (%)
Subserous	86	34%
Interstitial	117	47%
Sub mucous	47	19%

Table 5: Distribution of cases with respect to the location of the fibroids on the different layers of the uterus as seen on ultrasound.

Complications : Anaemia was the most frequent complication with a frequency of 72.7%. Necrobiosis was observed in 22.4% of cases (**Table 6**).

Complications		Number (n) N=250	Frequency (%)
Necrobiosis	Yes	56	22,4
	No	194	77,6
Anaemia	Yes	181	72,4
	No	69	27,6

Table 6: Distribution of cases with respect to complications.

Treatment

Therapeutic Means : Surgical treatment was the main treatment modality (69.2%) and 85% of cases received a blood transfusion (Table 7). Radical surgical means (total hysterectomy) was the most commonly practised (Table 8).

Type of treatment	Number(n) N=250	Percentage (%)
Solely medical	25	10.0%
Solely surgical	173	69.2%
Abstention	30	12.0%
Surgical and medical	22	8.8%
Blood transfusion	212	85%

Table 7: Distribution of cases with respect to therapeutic means.

Surgical Treatment

Surgical Treatment	Number (n)	Frequency (%)
Myomectomy	96	49.2%
Total Hysterectomy	99	50.8%
Total	195	100.0%

Table 8: Distribution of cases with respect to type of surgery.

Post operative complications : 32 cases (12.8%) of cases had post-operative complications with the majority of them being hemorrhage. We had 02 cases of death (Table 9).

Complication	Number(n) N=250	Frequency (%)
	32	12.8%
Hemorrhage	19	7.6%
Wound infection	10	4.0%
Textiloma	1	0.4%
Death	2	0.8%
No complications	218	87.2%

Table 9: Distribution of cases with respect to post-operative complications.

Discussion

Frequency : In our study we registered 250 cases of uterine fibroids out of 3512 hospitalisation cases during the study period giving a prevalence of 14% [5] reported lower frequencies of 6.7%. Cramer et al [6] described a serial histological study of 100 hysterectomy samples and discovered that the incidence of uterine fibroids moved from 33% diagnosed before surgery to 77% after pathology results. The real incidence of uterine fibroids is thus either under estimated or it tends to only report the symptomatic fibroids.

Socio-démographic, obstetrical and anthropometric characteristics: The median age of the participants was 37.74 with extremes of 20 years and 55years. The 30-40years age group was the most represented in our sample; 47.6%. This result corroborates that of [7] whose most represented age range was 31-37 years although they reported a higher frequency of 30.55%. For Kountan, [8], the peak age at which fibroids occur was between 34-44 years. Butram [9] revealed that 20% of women had fibroids before 30 years and 40 % of them had fibroids after 50 years. In our study, most of the women were housewives (36%) and public service workers (25.6%). Toure [10] had 76% housewives and 23% public service workers. We also found that, nulliparas were the most dominant group among our cases representing 51%. This value is higher than that of Koutouan [8] who reported 36,3%. Primiparas represented 25,6% and multiparas 23,4% of the study population. This finding emphasizes the fact that pregnancy is probably a protective factor.

Clinical characteristics

Symptoms : Genital bleeding was the most frequent symptom occurring in 61% of cases. The bleeding was classified as menorrhagia (56.5%), menometrorrhagia (32.8%) and metrorrhagia (10.7%). These results are similar to those of Ouattara [7] and Huguier [11] who found genital bleeding in 62.96% and 50% of cases respectively. Thiero [12] on the contrary had a lower frequency of 32.3% Pelvic pain as a symptom was represented in our sample by 40% whereas other authors had 15% for Ouattara [7] and 10,9% for Thiero [12]. These pains are due to an extrinsic compression of the uterus given the increase in size of the uterus as reported by all authors. Urinary symptoms such as pollakiuria was found in 31,1% contrary to only 2.7% reported by Ouattara [7] and 4% by Bayo [13]. Dysmenorrhoea was present in 32% of cases. It is usually due to the association of uterine fibroids and adenomyosis. Ouattara, Abolo et Koutouan [7, 14, 8] reported frequencies of adenomyosis of 4,41 %; 1,25% et 1,81% in women with fibroids In 8% of the cases, the patients came consulting for a sensation of pelvic mass, This is similar to findings by Ouattara [7] who had 8,33%. Lamorte [15] in his series found that 21% of patients presented with pelvic heaviness. This sensation of pelvic mass and heaviness is related to the size of the fibroids.

Diagnosis : In our series, all the patients carried out an ultrasound. The ultrasound aided in ascertaining the number of fibroids which for the most of them were multiple (86.8%) as well as the localisation on the uterine walls which were mostly interstitial (47%). Prior research by Thiero [12], revealed that 90,9% of cases had underwent a caesarean section (451/496). Sangaret [16] in Abidjan had a corporeal localisation of the fibroids in 76% of cases. Heyler [16,17] observed a 7% isthmic localisation. Koné [5] had 112 cases of corporeal fibroids (93,3%) ; 18 cases of isthmic fibroids (15,0%) and 4,2% interstitial fibroids. In our study we found that 19 % of fibroids were submucous, 47 % intramural and 34% subserous. This result is comparable to that of Thiero [12] who found 37.3% subserous and 7.4% intracavity. Our study also showed that 86.8% of women had multiple fibroids. These results are comparable to those of Ouattara [7] who had 9,25% de solitary fibroids and 90,74% polymyomatous uteri. Bayo [12] found 89% polymyomatous uteri and 11% solitary fibroids.

Treatment

Concerning the treatment options, 10% received medical treatment while 8% had medical treatment followed by surgical treatment. Medical treatment with Progesterone is aimed at stopping bleeding while GnRH analogues help reduce the size of the fibroids prior to surgery. This result is largely less than those reported by Ouattara [7] who administered GnRH analogues in 60.32% of cases and Toure [10] who did so in 52% of cases. This could be explained by the expensive nature of the drug in our setting [18,19] did a metaanalysis which came up with the conclusion that tranexamic acid reduces per operatory bleeding during myomectomies and menorrhagia secondary to fibroids.

Conservative surgical means like myomectomy which have the advantage of preserving the fertility of women was done in our series in 49.2% of cases. This is similar to results of Thiero [12] who reported 37.9% in their study. Kountan [8] found 17,05% of myomectomies and Keita reported 78,9% (30cases) of myomectomies/polymyomectomies.

We carried out conservative surgery in patients with a solitary fibroid or in patients who desired to maintain fertility. For the other patients radical surgery was indicated. Thus, we carried out total hysterectomies in 50.8% of cases [20] in Dakar in 2003 found 27,86% of total hysterectomies while Thiero [12] reported 26% of total hysterectomies, 4.6% with annexectomies

In all our patients open surgery by laparotomy was the surgical method [21] in their study found that of the 436 women who underwent a myomectomy, 88 of the surgical interventions (20.2%) were carried out by laparoscopy, 342 (78.4%) by abdominal route and 6 (1.38%) were started by laparoscopy and then converted to laparotomy. They concluded that compared to abdominal myomectomies, those done by laparoscopy in adequately preselected patients was associated with comparable surgical outcomes but with shorter stay in hospital.

In our setting, we do not dispose of laparoscopy machines which explains why all our patients were operated by laparotomy. Majority of our patients (85%) received a blood transfusion. Post operatory complications were registered in 32 cases (12.8%) two of which were cases of death. The two cases of death occurred due to non-availability of blood products after myomectomies in Rhesus negative patients who had severe anaemia. Toure [10] registered 1 case of death 1 case of anaemia and 1 case of hemorrhage while Traore [22] in 1992 working on 192 patients registered 1 case of peritonitis, 1 case of death secondary to septic shock and 1 case of wound infection

Conclusion

Uterine fibroids are a very common in our local setting. They are common in young women. Ultrasound is the most essential para clinical imaging test needed for diagnosis. The management is mostly surgical and is at times marred by complications or even death. Emphasis should be laid on the fight against risk factors especially obesity by sensitising women on the advantages of regular physical activity and healthy lifestyle.

References

1. Lansac J, Lecomte P, Marret H (1999) Gynecology for the Practitioner. 5th éd Masson, Paris. Pp: 61.
2. Racinet C (2009) Epidémiologie, facteurs de risque, symptomatologie des myomes utérins. Médecine de la reproduction 11 : 2.
3. Koskas M, Chabbert-buffet N, Douvier S, Huchon C, Paganelli E, et al. (2011) Role of medical treatment for symptomatic leiomyoma management in premenopausal women. J Gynécol Obstét Biol Reprod 40: 858-874.
4. Vilos G, Allaire C, Laberge PY, Leyland N (2003) Prise en charge des léiomyomes utérins. J Obstet Gynaecol Can 25 : 407-418.
5. Koné B (2008) Uterine fibroma in the gyneco-obstetrics department of the reference health center of commune V of Bamako in relation to 120 cases. Thesis Med BKO 2008. Pp: 172.
6. Cramer SF and Patel A (1990) The frequency of uterine leiomyomas. Am J Clin Pathol 94: 435-438.
7. Ouattara D (2006) Uterine myoma at the commune IV referral health center for 108 cases. Thèse médecine MALI. Pp: 157.
8. Koutouan JC (1985) Contribution to the study of uterine fibroids (about 515 cases observed at the CHU of Cocody, Abidjan). Thèse de Médecine: Abidjan P: 662.
9. Buttram VC and Reiter RC (1981) Uterine leiomyomata: etiology, symptomatology, and management. Fertil steril 36: 433-435.
10. Touré OD (1992) Contribution to the study of uterine fibroids in relation to 100 cases collected in the obstetric gynecology department of the Point G national hospital. Thèse de Méd. Bamako. Pp : 35.
11. Huiguiet J and Cerbinnet G (1961) Uterine surgery, Masson et Cie Paris. 344 : 102-129.
12. Thiero D (2004) Fibrome utérin : Aspects épidémiocliniques et thérapeutiques dans le service de gynéco obstétrique au centre de référence de la commune V pour 496 cas. Thèse de Méd. Bamako Pp: 09.
13. Sine B (1973) Contribution to the study of uterine fibromyomas in DAKAR concerning 316 observations. Medical thesis DAKAR.
14. Abolo ML (1972) Contribution à l'étude des fibromyomes utérins a propos de 500 cas de fibromes utérins à l'hôpital central de Yaoundé. Thèse à Yaoundé.
15. Lamorte A, Lallimasi S, Diansnd M (1993) Mortality associated with abdominal myomectomy. Obstet gynécol 82: 879-900.
16. Sangaret MA, Bohoussou KM, Welfens ECH, Koné N (1972) Les fibromes utérins en Cote d'Ivoire. C.R.SOCS. Franç-Gyneco 42 : 594-601.
17. Heyler BI (1963) Les indications thérapeutiques du fibrome utérin Gaz Méd. France 70: 2425-2488.
18. Peitsidis P and Koukoulomati A (2014) Tranexamic acid for the management of uterine fibroid tumors: A systematic review of the current evidence. World J Clin Cases 2: 893-898.
19. Keita MM (2005) Fibrome utérin et groupe sanguin érythrocytaire au centre national de transfusion sanguine de Bamako. Thèse Méd Bamako. Pp: 53.