Epidemiological Profile of Abnormal Uterine Bleeding at the Gyneco-Obstetric and Pediatric Hospital of Yaounde

Kasia Jean Marie¹,², Noa Ndoua Claude Cyrille¹,²*, Belinga Etienne¹,², Foumane Pascal¹,³
¹Faculty of Medicine and Biomedical Sciences, University of Yaounde I, Yaounde, Cameroon
²Gynaecological Endoscopic Surgery and Human Reproduction Teaching Hospital, Yaounde, Cameroon
³Gyneco-Obstetric and Pediatric Hospital of Yaounde, Yaounde, Cameroon
Email: *claudenoa@yahoo.co.uk

Abstract

Introduction: Abnormal uterine bleeding (AUB) is one of the most commonly encountered symptoms in gynecological consultations. The prognosis is rarely endangered but the impact on the quality of life is sometimes important. Objective: Our objective was to assess the epidemiological profiles of patients consulting for AUB at the Yaounde Gyneco-Obstetrics and Pediatrics Hospital. Methodology: We carried out a descriptive cross-sectional study at the Yaounde Gyneco-Obstetrics and Pediatrics Hospital. We included all women with acute or chronic per vaginal bleeding and we excluded all cases of bleeding in pregnancy, bleeding due to infection, pre pubertal bleeding and the incomplete files. Data were collected from January to May 2019, using a questionnaire, and analyzed using Epi Info version 3.5.4 and SPSS version 7. softwares. Results: A total of 163 patient files were exploited and analyzed. The frequency of AUB during gynecological consultations is 3.7%. AUB patients had a mean age of 36 ± 12.27 years and the most represented age group was 30 to 35 years, with 17.1% cases. Sixty-seven representing 41.1% patients were married, 23.9% were civil servants, 23.1% were tertiary employees, and 40.3% had secondary level of education. Almost 44.1% were nulliparous and 53.9% had unknown HIV status and 83.4% have never used contraception. Conclusion: The frequency of AUB during gynecological consultations is 3.7%. Those women have an average age of 36 years, most of them are nulliparous and have never use contraception.

Keywords

Morbidity, Menstrual Cycle, Abnormal Uterine Bleeding
1. Introduction

Abnormal Uterine Bleeding (AUB) can be defined as any deviation from the normal menstrual cycle and includes changes in regularity and frequency of bleeding, period of bleeding or amount of blood loss [1]. Abnormal uterine bleeding occurs when either the frequency or quantity of uterine bleeding differs from that mentioned above or the woman has spotting or bleeding between her menstrual periods. It may be caused by a variety of factors. The two most common causes are structural abnormalities of the reproductive system and ovulation disorders. Women who are postmenopausal should seek prompt care from a doctor for any bleeding, as the causes of bleeding and concerns are different from those in women of reproductive age. Although rarely life-threatening, these disorders can significantly affect the quality of life, lead to surgery (including hysterectomy), and ultimately have significant effects on the health system. In addition abnormal uterine bleeding can be encountered at any age from puberty to menopause.

2. Methods

We conducted a cross sectional study with a prospective data collection at the Gyneco-obstetric and pediatric Hospital of Yaounde during a period of 5 months from January to May 2019. We included consenting patients with acute or chronic bleeding and excluded pregnant women, pre-pubertary bleeding and bleeding of infectious origin. We proceeded by probabilistic sampling, including the records of all patients fulfilling the inclusion criteria during the study period. A data sheet was designed and tested prior to use to facilitate the collection of essential information and subsequent data analysis. The sociodemographic variables studied were age, educational level, occupation and the marital status. Reproductive variables were the number of pregnancies, the number of deliveries, the characteristics of the menstrual cycle. The data were analyzed using the software of Epi Info and SPSS version 2.5 end expressed in absolute or relative frequency for qualitative variables, and on average for quantitative variables. Tables and charts were done using the Excel 2007 software.

Ethical Consideration

We obtained ethical approval from the institutional ethical review board of the Faculty of Medicine and Biomedical Sciences. Authorization was also obtained from the director of study site. The identity and personal details of participants of the study were kept strictly confidential. Only the investigator was able to decipher those codes used in the questionnaires.

Limitations of our Study

The size of the sample and the absence of anatomo-pathological diagnosis for some case are some limits of this study.

3. Results

During the 5 months of our study from January to May 2019, 4321 gynecological
consultations were recorded, 163 patients were included in our study. The frequency of abnormal uterine abutments (AUB) in gynecological consultations was therefore 3.77%.

The most represented age group was 20 to 30 years old with 17.18%, the average age was 36 ± 12.27 years and the extreme age 11 and 71 years old. The majority of patients were married thus 41.1%. Civil servants accounted for 23.93% (Table 1).

**Reproductive Characteristics**

About 33.1% of the patients had never been pregnant and 28.8% had more than 2 pregnancies. 44.1% of the patients had never given birth, 30.06% had already given birth at least twice. The majority of patients were not menopausal, representing 91.4%. Of these, 65.1% had an irregular cycle and 27.51% had heavy bleeding. Only 16.5% of patients used a contraceptive method among which, more than half used injectable progestins. The majority of patients had unknown HIV status 51.9% (Table 2).

Abundant menstrual bleeding was the most common reason for consultation with 40.4%, followed by intermenstrual bleeding 22.6%, infrequent menstrual bleeding 16.5%, prolonged menstrual bleeding 12.88%, post coital bleeding and mild menstrual bleeding 0.6%. In 50.9% of cases there were no associated signs or symptoms. We described other abnormalities like post menopausal bleeding (8.58%) and intermenstrual bleeding (22.7%) (Table 3).

**Table 1. Distribution according to socio-demographic variables.**

| Socio-demographic variables | Number N = 163 | (%) |
|----------------------------|----------------|-----|
| **Age (years)**            |                |     |
| <15                        | 1              | 0.61|
| [15 - 20]                  | 15             | 9.20|
| [20 - 25]                  | 19             | 11.66|
| [25 - 30]                  | 28             | 17.18|
| [30 - 35]                  | 21             | 12.88|
| [35 - 40]                  | 18             | 11.04|
| [40 - 45]                  | 25             | 15.34|
| [45 - 50]                  | 14             | 8.59 |
| [50 - 55]                  | 14             | 8.59 |
| ≤55                        | 7              | 4.29 |
| **Marital status**         |                |     |
| Single                     | 59             | 36.20|
| Married                    | 67             | 41.10|
| Divorced                   | 2              | 1.23 |
| Widow                      | 3              | 1.84 |
| In relationship            | 29             | 17.79|
| **Profession**             |                |     |
| Student of secondary education | 45         | 27.60|
| Civil servant              | 39             | 23.93|
| Employee of the tertiary sector | 38       | 23.31|
| Household                  | 35             | 21.47|
| Retired                    | 6              | 3.68 |
| **Level of study**         |                |     |
| None                       | 1              | 0.64 |
| Primary                    | 36             | 23.08|
| Secondary                  | 63             | 40.38|
| University                 | 56             | 35.90|
Table 2. Distribution according to reproductives characteristics.

| Reproductives variables | Number | (%)  |
|-------------------------|--------|------|
| **Gestity (n = 163)**   |        |      |
| Nulligeste              | 54     | 33.13|
| Primigeste              | 24     | 14.72|
| Multigeste              | 47     | 28.83|
| Grandmultigeste         | 38     | 23.31|
| **Parity (n = 163)**    |        |      |
| Nulliparous             | 72     | 44.17|
| Primiparous             | 20     | 12.27|
| Multiparous             | 49     | 30.06|
| Grandmultiparous        | 22     | 13.50|
| **Cycle (n = 163)**     |        |      |
| Menopausal              | 14     | 8.59 |
| Non menopausal          | 149    | 91.41|
| **Rhythm of the menstrual bleeding (n = 149)** | | |
| Regular bleeding        | 17     | 11.40|
| Irregular bleeding      | 97     | 65.10|
| Aménonrhea              | 35     | 23.48|
| **Volume of the menstrual bleeding (n = 149)** | | |
| Abondant                | 41     | 27.51|
| Normal                  | 106    | 71.14|
| Light                   | 2      | 1.34 |
| <24 days                | 14     | 9.39 |
| Between 24 to 38 days   | 119    | 79.86|
| >38 days                | 16     | 10.73|
| **Duration of the menstrual bleeding (n = 149)** | | |
| None                    | 136    | 83.44|
| Pills                   | 1      | 0.61 |
| Intra-uterin Device     | 7      | 4.29 |
| Injectableprogesteron   | 12     | 7.36 |
| Implant                 | 2      | 1.23 |
| Condoms                 | 5      | 3.07 |

Table 3. Distribution according to the clinical profile.

| Clinical variables | Number | (%)  |
|--------------------|--------|------|
| Abnormality of the menstrual cycle (n = 149) |        |      |
| No abnormality     | 125    | 76.69|
| No Menses          | 6      | 9.20 |
| Irregular menses   | 18     | 14.11|
| Abnormality of the volume of menstrual bleeding (n = 149) | | |
| Normal menses      | 82     | 58.90|
| Abondant menses    | 66     | 40.49|
| Light menses       | 1      | 0.61 |
| Abnormality of the duration of the menstrual bleeding (n = 149) | | |
| Normal menses      | 128    | 87.12|
| Prolonged menses   | 21     | 12.88|
| Abnormality of the frequency |        |      |
| Normal menses      | 128    | 78.53|
| Too frequent       | 8      | 4.91 |
| spaniomenorrhea    | 13     | 16.56|
| Abnormality of | 143 | 78.90  |
| Other abnormality (n = 163) | | |
| Absents            | 113    | 69.33|
| Intermenstral bleeding | 37    | 22.70|
| Post coital bleeding | 1      | 0.61 |
| Post menopausal bleeding | 14 | 8.58 |
4. Discussion

Our study showed that 3.7% of women suffered from abnormal uterine bleeding (AUB). In a systematic review of menstrual disorders in developed countries, Harlow and Campbell reported a prevalence of 5% to 15% of AUB [1]. Nevertheless, H. Kazemijaliseh et al. in Iran have found a prevalence of 30% which is much higher than our result [2]; the difference can be explained by the fact that at home, except emergency situation, women of childbearing age with AUB consult for the most part in case of with infertility or if the disorders become very important.

The women most affected by AUB were those between the ages of 20 and 50 with an average age of 36 years. They accounted for 77.6% of our sample. Sukhbir et al. (2013) [3] in his study of abnormal uterine bleeding in pre-menopausal women found that menometrorragia mainly affects women during their period of genital activity. They find a prevalence of 10% to 25% among women between 30 and 49 years old and 24% among 36 - 40 year olds. Moreover, in 2018, Neossi Guena found that women aged 20 to 50, who accounted for 90%, suffered from menorrhagia, which corroborates our results [4]; this is certainly because of the hormonal disorders that are common in this phase of the female life. Dysfunctional uterine bleeding which is the occurrence of uterine bleeding unrelated to structural abnormalities of the uterus or the endometrial lining is a diagnosis of exclusion usually occurs more commonly in the first five years after a woman starts menstruating and as she approaches menopause, but it can occur at any time period. The cause of is anovulation, the absence of ovulation and the orderly secretion of estrogen and progesterone, and may alert the woman and her physician to the fact that she is no longer ovulating normally.

Women who had at least one pregnancy were the most affected by AUB in our study with 14.7% primigestes, 28.8% multigestes and 23.3% large multigestes. Nyingone in 2015 [5] found that 55.8% of women with genital hemorrhage were multigestes, 29.8% nulligestes and 14.4% primigestes. Most of our patients, 83.4%, had never took any method of contraception. Among the patients on contraception, 53.8% were on hormonal contraception while 29.6% had an intra-uterine device. Nyingone in 2015 found that, 29 patients out of a sample of 104 or 27.8% had to take contraceptives which is not far from our results [5], the author specifies that, the oral contraceptive and the IUD are frequent causes of metrorrhagia. Therefore, the use of these contraceptive methods should be sought in case of abnormal uterine bleeding.

| Body mass index | Count | Mean |
|-----------------|-------|------|
| <18.5           | 1     | 0.61 |
| [18.5 - 25]     | 53    | 32.52|
| [25 - 30]       | 72    | 44.17|
| [30 - 35]       | 25    | 15.34|
| [35 - 40]       | 7     | 4.29 |
| ≥40             | 5     | 3.07 |
Abundant menstrual bleeding was the most common menstrual disorder with a prevalence of 66%. This disorder is the most serious symptom that can cause or exacerbate anemia and even sometimes life-threatening. Fraser et al. Analyzed the prevalence of heavy menstrual bleeding in women aged 18 - 57 in 5 European countries [6]. In this study 1225 women out of a total of 4506 or 27.1% suffered from this symptom; which is clearly different of our result. The reasons for this difference can be explained by the fact that this disorder was identified subjectively in our study (by simple questioning of the patient) whereas in the European study the pictorial blood assessment chart was used and represents a more objective quantification tool for menstrual bleeding.

5. Conclusion

The frequency of AUB during outpatient gynecology consultations is 3.7%. Patients consulting for AUB had an average age of 36 years and the most represented age group was 30 to 35 years old. Abundant menstrual bleeding was the most common complaint.

Conflicts of Interest

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

References

[1] Harlow, S.D. and Campbell, O.M. (2004) Epidemiology of Menstrual Disorders in Developing Countries: A Systematic Review. BJOG, 111, 6-16.

[2] Kazemijaliseh, H., Ramezani Tehrani, F., Behboudi-Gandevani, S., Khalili, D., Hosseinpanah, F. and Azizi, F. (2017) A Population-Based Study of the Prevalence of Abnormal Uterine Bleeding and Its Related Factors among Iranian Reproductive-Age Women: An Updated Data. Archives of Iranian Medicine, 20, 558-563.

[3] Sukhbir, S., Carolyn, B., Sheila, D., Nicholas, L. and Wendy, L. (2013) Saignements utérins anormaux chez les femmes pre menopausees. Journal d'Obstetrique et Gynecologie du Canada, 35, S1-S32.

[4] Neossi Guena, M., Nganyou Piaple, I., Florent, A. and Nkigoum Nana, A. (2018) Apport de l'Echographie dans l'Orientation Diagnostique des Menometrorragies a l'Hopital Regional de Ngaoundere. Health Sciences and Diseases, 19.

[5] Nyingone, S. (2015) Profil epidemiologique et etiologique des hemorrhagies genitales chez la femme en activite genitale en dehors de la grossesse. These de Doctorat d'Universite, Universite sidi mohammed ben abdellah.

[6] Fraser, I.S., Critchley, H.O., Broder, M. and Munro, M.G. (2011) The FIGO Recommendations on Terminologies and Definitions for Normal and Abnormal Uterine Bleeding. Seminars in Reproductive Medicine, 29, 383. https://doi.org/10.1055/s-0031-1287662