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To study the socio-demographic profile and clinical profile of abnormal uterine bleeding cases attending new civil hospital, Surat, Western India

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ABSTRACT

Background: There are so many concerns and worries about menstruation. With the use of advance method of contraception, women are experiencing more menstrual related problems. Now a days, menstrual related complaints are more common in gynaec clinic. So, we had conducted this study to document the sociodemographic and clinical profile among the attendees of gynaec clinic with menstrual related problem.
Materials and Methods: Observational cross-sectional study carried out in western part of India with 100 patients after their written informed consent. Data were collected on pre-designed semi structured questionnaire which consist of sociodemographic and clinical questions. All data were entered in MS excel spreadsheet and analyzed with the help of SPSS V.20.
Results: Current study reported 8% of new Gynaec attendees had problem of abnormal uterine bleeding. Majority of patients were belonging to age group 21 years to 40 years (83%) and most of the patients were multipara (75%). Commonest complains among patients were menorrhagia (80%). Most of the patients were reported haemoglobin of less than 12 mg/dl.
Conclusion: Abnormal uterine bleeding is a distressing problem for women in their reproductive age groups especially in 21 years to 40 years.

1. Introduction

Abnormal uterine bleeding (AUB) is defined as abnormal uterine bleeding in the reproductive age group without any detectable organic lesions. More precisely the term 'AUB' refers to abnormal uterine bleeding which results from an ovarian endocrinopathy and most commonly anovulation.[1] It includes all the varieties of menstrual disturbance except amenorrhea. Although, there is no close relationship exists between the clinical variety of bleeding and the underlying pathology. It had found most at the two ends of the reproductive life. Most of the cases (75%) occurring in the over 35 years age group.[2]

In 20^{th} century, many concerns and worries about menstruation has become a problem. Repeated childbirth and lactation caused prolonged amenorrhea in the past. In recent years, with the advent of the widespread use of contraception, women have been experiencing considerable increase in the number of menstrual periods occurring during their reproductive life. Now days, role of women within society is changing, their tolerance of the discomfort and inconvenience of menstruation has declined. It has been reported that menstrual disturbances are most common complaints that confront gynaecologists. In Canada, hysterectomy is the most common major surgery performed on women and 18% are done because of menstrual disorders.[2]

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The endometrium is under an exceptionally fine hormonal balance. When this balance is upset, AUB may occur. There are two theories for the mechanism of the disruption, anovulation and abnormal local production of prostaglandins. Anovulation can occur at any time during the reproductive life. It is most common immediately after menarche and before the menopause.[3] The temporary failure to ovulate in girls is usually short and is related to immaturity of the hypothalamic-pituitary mechanisms, which involved in pre-ovulatory gonadotropin release. In some cases, irregular bleeding may persist for several years. But few studies have been carried out on the endocrine characteristics of such patients.[2] AUB can arise from diverse functional and structural irregularities, necessitating a comprehensive assessment, particularly in perimenopausal women. A considerable proportion of endometrial samples displayed pathology, underscoring the significance of endometrial curettage and biopsy as crucial procedures.[4] This study was conducted for documenting sociodemographic profile and clinical profile of abnormal uterine bleeding cases. (Table 1)

2. Materials and Methods

Present observational cross-sectional study was conducted in outpatient department, department of obstetrics and gynaecology, New Civil Hospital, Surat over the period of six weeks after ethical approval from institute ethical committee. Total 100 gynaecological patients with history suggestive of AUB were enrolled in the study after their written informed consent. Detailed history with reference to age, menstrual complaints(duration of cycle, duration of flow, dysmenorrhoea, passage of clots, flooding, pre-menstrual or post menstrual spotting), obstetric history (time since last delivery or last abortion, history of ongoing breast feeding), contraception history (IUCD insertion, OC pills, injectable contraception, type of sterilization procedure if any), past history(suggestive of bleeding disorder), personal and medication history and family history was taken. Detailed examinations including height, weight, general examination, vital signs, systemic examination and per abdomen examination was done. Per speculum and per vaginal examination was also done to exclude organic, pregnancy related or inflammatory cause of abnormal uterine bleeding before labelling the patients as a case of abnormal uterine bleeding. Blood investigation, which included Haemoglobin, platelet count, prothrombin time, was done. Pelvic USG was also conducted to note the size of uterus, endometrial thickness, fibroid or adenomyosis or adnexal mass in all cases. Menstrual blood loss also calculated from detailed menstrual history. Assessment of menstrual blood loss.

Data were collected on pre-designed, semi structured questionnaire, which consist of socio-demographic profile, clinical profile, associated symptoms, drug history and various laboratory tests and radiological investigations. Participants informed regarding participations, which was strictly voluntary, and they can withdraw their participations at any time. After data collection, all data were entered and analysed by using Microsoft Office Excel 2007. Quantitative data were presented with mean and SD, while qualitative data were presented with frequency and percentage. Bar diagrams used for graphical presentation.

	Pads per day	**Blood loss total days**
Extremely heavy	More than 5 pads	More than 8
Heavy	4 to 5 pads	6 to 7
Like normal	3 pads	4-5

3. Results

Cross sectional study conducted among 100 patients with history suggestive of uterine bleeding. Total number of new gynaecological OPD attendees during same period were 1250 cases. Current study reported 8% of new Gynaec attendees had problem of abnormal uterine bleeding. Majority of patients were belonging to age group 21 years to 40 years (83%) and most of the patients were multipara (75%) followed by primipara(16%) and nullipara (9%). Commonest complains among patients were menorrhagia (80%), polymenorrhagia (18%) and metrorrhagia (2%). Present study reported heavy bleeding (75%) in most of the cases followed by extremely heavy bleeding (25%), further amenorrhea found in 31% cases, while mild, moderate, and severe dysmenorrhoea found in 31%, 29% and 9% respectively. Around half of the patients were underwent sterilization, where abdominal sterilisation (38%) was most common method followed by laparoscopic method. According to BMI, almost half of the patients (48%) were underweighting (BMI<18.5 kg/m^2) followed by normal BMI (44%) and overweight(8%). Moreover, all the patients had haemoglobin (Hb) less than 12 mg/dl, where majority patients (73%) had Hb between 8.1 to 10 mg/dl, followed by 10.1 to 12 mg/dl(17%) and 5 to 8 mg/dl(10%).

4. Discussion

Current study encompassed 1250 new gynecological OPD attendees, where 8% of the new gynecological OPD attendees presented with abnormal uterine bleeding, indicating a significant proportion of women grappling with this issue. Out of them 100 patients were enrolled in a current study with a history suggestive of uterine bleeding sheds light on various aspects of gynecological health within the study population. Notably, demographic trend reveals that most patients belong to the age group of 21 to 40 years, comprising 83% of the participants. Similarly, majority of AUB patients belongs to 21-40 years age group in studies conducted by Sedhai and Shrestha[5] (57.3%) and Singh et

Table 1: Distribution of patients based on sociodemographic and clinical parameters

Variables		No of patients	Percent
Age group (Years)	≤ 20 years	8	8%
	21 – 40 years	83	83%
	> 40 years	9	9%
BMI	Underweight	48	48%
	Normal	44	44%
	Overweight	8	8%
Para	Nullipara	9	9%
	Primipara	16	16%
	Multipara	75	75%
Clinical features	Menorrhagia	80	80%
	Polymenorrhagia	18	18%
	Metrorrhagia	2	2%
Blood loss	Extremely heavy	25	25%
	Heavy	75	75%
Dysmenorrhea	Absent	31	31%
	Mild	31	31%
	Moderate	29	29%
	Severe	9	9%

al.[6] (37.5%), while AUB found in higher age patients (41-50 years) in study done by Choudhary and Nath[7] (72%).

Additionally, parity wise distribution in this study noted multipara patients in three-fourths (75%), followed by primiparas (16%) and nulliparas (9%). Similarly, most of the patients were multipara in Choudhary and Nath[7] study (89%) and Singh et al[6] study (71.7%) and Chauhan et al.[8]

The present study delves into the varied complaints reported by patients, with menorrhagia being the most prevalent (80%), followed by polymenorrhagia (18%) and metrorrhagia (2%). Moreover, heavy bleeding was reported in 75% of cases and extremely heavy bleeding in 25%. The study also identifies associated symptoms, such as dysmenorrhea, categorized as mild, moderate, and severe in 31%, 29%, and 9% of cases, respectively. Similarly, in study done by Radha and Mallikarjuna[9] had noted frequently observed bleeding pattern included menorrhagia (64%), polymenorrhoea (28%), metrorrhagia (18%), and menometrorrhagia (8%). Study done by Choudhary and Nath[7] had found that more than two-thirds of patients (68%) suffering from menorrhagia, while 14% suffering from metrorrhagia, 12% suffering from polymenorrhoea and 6% from menometrorrhagia. They further classify that 56% had mild, 29% moderate and 15% had high AUB. Though in study done by Singh et al.,[6] 48.3% had menorrhagia, 30.5% had polymenorrhagia, 18.1% had oligomenorrhoea and 6.3% had metrorrhagia.

An intriguing aspect of the study is the reproductive choices and methods of contraception among the participants. Around half of the patients underwent sterilization, with abdominal sterilization (38%) being the most common method, followed by laparoscopic methods. This provides insights into the family planning practices within the study population. Study by Peterson et al. involving tubal sterilization among 95 females, affirmed that there were no enduring alterations in inter menstrual bleeding or the duration of the menstrual cycle. However, notable reduction was observed in the number of days associated with bleeding.[10]

This study also addresses the nutritional status of the participants, as indicated by their BMI. A significant proportion (48%) of the patients were classified as underweight, highlighting a potential correlation between nutritional status and uterine bleeding issues. Additionally, all patients had hemoglobin levels below 12 mg/dl, with the majority (73%) falling within the range of 8.1 to 10 mg/dl. This underscores the potential impact of abnormal uterine bleeding on the overall health and well-being of the study population. In Singh et al.[6] study, 25% patients were overweight, 9% patients were underweight and 6% patients were obese. Menstrual disorders exhibit higher prevalence among women characterized by overweight (BMI 25–30 kg/m^2) or obesity (BMI ≥30 kg/m^2) compared to those falling within normal BMI range (BMI 20–25 kg/m^2). The association between menstrual disorders and obesity could be attributed to heightened oestrogen levels, consequence of peripheral conversion of androgens to oestrogen facilitated by aromatase activity in adipose tissue, with specific focus on and rostenedione.[11,12] Furthermore, Females maintaining lower BMI (≤18.5 kg/m2), either through restricted diets or excessive exercise were at higher risk of encountering menstrual disruptions, specifically amenorrhea, attributed to functional hypothalamic disorders, when compared to those with normal BMI.[12–14] Study by Swapna and Fatima[15] noted that among 31-40 years old females, AUB was more prevalent among individuals with associated co-morbidities, obesity, and women from lower socioeconomic backgrounds.

5. Conclusion

Abnormal uterine bleeding is a distressing problem for women in their reproductive age groups especially in 21 years to 40 years. Present study noted multipara women suffers more in comparison than nulliparous women while menorrhagia was most frequent complains. It is essential to diagnosed it in early phases by various intervention like detailed clinical history or investigations.

6. Source of Funding

None.

7. Conflict of Interest

None.

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