Study of various factors associated with perimenopausal bleeding

Sanjay B. Bansode^{1*}, Gajanansing Patil²

¹Assistant Professor, ²Resident, Department of OBGY, SRTR Government Medical College, Ambajogai, Beed, Maharashtra, INDIA. Email: <u>dr.sanjaybansodeobgy@gmail.com</u>

Abstract Introduction: Perimenopause is the time when body is preparing itself to go into menopause stage. The important change during perimenopause occurs in the pattern of menstrual cycle. In perimenopausal women, abnormal uterine bleeding includes any change in menstrual period frequency or duration or amount of flow as well as bleeding between cycles. Aims and objectives: to study the various factors associated with perimenopausal bleeding. Materials and method: Women attending gynecology department with perimenopausal bleeding were enrolled in the study. Detail history, clinical finding were recorded. Histopathological examination was done in surgically treated cases. Results: The mean age in present study was 43.19±2.57 years. 73.75% cases were in the socioeconomic class IV. Most of the cases 73 i.e. 91.25% were multipara. Majority of the cases (60%) presented with menorrhagia. Maximum 66 i.e. 82.5% cases had dysfunctional uterine bleeding followed by fibroid. On histopathological examination proliferative endometrium was the most common finding in 41.66% cases followed by secretary endometrium in 20.83% cases. Conclusion: Perimenopausal bleeding is common in multiparous and lower socioeconomic class women. Dysfunctional uterine bleeding is the most common cause of perimenopausal bleeding which present with menorrhagia and proliferative endometrium on histopathological examination.

Key words: perimenopausal bleeding, menorrhagia, multipara, proliferative endometrium.

*Address for Correspondence

Dr. Sanjay B. Bansode, Assistant Professor, 2Resident, Department of OBGY, SRTR Government Medical College, Ambajogai, Beed, Maharashtra, INDIA.

Email: dr.sanjaybansodeobgy@gmail.com



INTRODUCTION

Menopause generally occurs between 45 and 55 years of age; the average is 51 years. Perimenopause is the time when body is preparing itself to go into menopause stage. The important change during perimenopause occurs in the pattern of menstrual cycle. In perimenopausal women, abnormal uterine bleeding includes any change in menstrual period frequency or duration or amount of flow as well as bleeding between cycles¹. Abnormal uterine bleeding has a significant

impact on women's health resulting in iron deficiency anemia and impaired quality of life. The social and economic cost of dysfunctional uterine bleeding is considerable. Psychiatric morbidity is also associated with dysfunctional uterine bleeding. About one third of the hysterectomies are carried out for menstrual disturbances alone. A review of 500 perimenopausal women seen sequentially by a gynaecology service found that 18% had menorrhagia (heavy bleeding), metrorrhagia (intermenstrual bleeding), or hypermenorrhea (frequent periods)². The cause of AUB in perimenopausal women is found in 50% to 60% of cases. The remaining cases where no organic cause is found are classified as dysfunctional uterine bleeding. History focuses on identifying the type of AUB- ovulatory, anovulatory, or anatomic-in order to guide treatment. Ovulatory bleeding is more common, usually cyclic and can be associated with midcycle pain, premenstrual symptoms and dysmenorrhea³. Anovulatory bleeding occurs more frequently at the extremes of reproductive age and in obese women. It is usually irregular and often heavy. Anovulatory bleeding poses a higher risk of endometrial hyperplasia. Polycystic ovarian syndrome is a common cause of anovulatory bleeding. Fibroids or polyps are the most common causes of anatomic AUB; 20% to 40% of women have fibroids⁴. Some medications like anticoagulants, antidepressants, hormone replacement therapy, tamoxifene, thyroxine can also cause AUB^5 . Evaluation of AUB in perimenopausal women is challenging. As a result of the decline in ovarian function, changes in menstrual cycles are common in these women. Investigations can include pregnancy testing if indicated and a complete blood count. Further investigations include ultrasonography to look for ovarian or uterine disease and endometrial biopsy. Endometrial biopsy is a simple office procedure that can be done by family physicians. As with postmenopausal bleeding, abnormal perimenopausal bleeding is associated with endometrial carcinoma in approximately 10% of cases⁶. Thus the present study is an attempt to evaluate underlying causes of perimenopausal bleeding.

AIMS AND OBJECTIVES

To study the various factors associated with perimenopausal bleeding.

MATERIALS AND METHOD

The present study was conducted at Swami Ramanand Teerth Rural government Medical College and Hospital, Ambajogai during period of September 2009 to April 2011. All women coming to gynecological outpatient department (OPD) with abnormal uterine bleeding and those who were in the age group between 40-50 years were selected for study. thus total 80 women were selected with perimenopausal bleeding. The detail information regarding age, socioeconomic status, literacy and parity was recorded on a prestructured proforma. A detailed history of the patient was obtained taking into account any associated symptoms like dysmennorrhea, dyspareunia, post coital bleeding, intermittent spotting, unhealthy discharge, heaviness or discomfort in lower abdomen, backache and or any other constitutional symptoms. General and systemic examination was done in all cases. In every patient per speculum and per vaginal examination was performed. According to the findings on history and clinical examination, provisional diagnosis was made and further plan of management was decided. The patients were treated in outpatient department or they were admitted in gynaecology wards for further management depending upon the diagnosis and treatment required. Histopathological examination was done in surgically treated cases and the findings were noted.

RESULTS

Table 1: Distribution of cases according to Age					
Age Group (years)	oup (years) No. of Cases Percentage		Mean±SD		
40-42	39	48.75%			
43-45	26	32.5%	42 40 2 57		
46-48	11	13.75%	43.19±2.57		
49-50	4	5%	years.		
Total	80	100%			

It was observed that out of 80 cases, majority of the cases (48.75%) were in the age group 40-42 years followed by 43-45 years (32.5%). Mean age of the cases in the present study was 43.19 ± 2.57 years.

Table 2: Demographic distribution of cases

Variable		Cases (n=80)	Percentage
Socioeconomic Status	Class I	2	2.5%
	Class II	5	6.25%
	Class III	9	11.25%
	Class IV	59	73.75%
	Class V	5	6.25%
Literacy	Literate	17	21.25%
	Illiterate	63	78.75%
	Nullipara	4	5%
Parity	Primipara	3	3.75%
	Multipara	73	91.25%

It was observed that majority of the cases in the study was of lower socioeconomic class. 73.75% cases were in the class IV followed by 11.25% in class III. It was observed that 78.75% cases were illiterate, while remaining 21.25% were literate. Out of 80 cases maximum 73 i.e. 91.25% cases were multipara, while minimum 3 i.e. 3.75% cases were primipara.

Table 3: Distribution of	of cases	according	to	type	of	bleeding	and
	1.						

diagnosis				
Variable		Cases(n=80)	Percentage	
Type of bleeding		Menorrhagia	48	60%
	Continuous	15	18.75%	
	Polymenorrhagia	11	13.75%	
		Metromenorrhagia	4	5%
		Polymenorrhea	2	2.5%
		Dysfunctional Uterine Bleeding	66	82.5%
Diagnosis	Fibroid	8	10%	
	Adenomyosis	2	2.5%	
		Endometrial Polyp	4	5%



Graph 1: Distribution of cases according to diagnosis

It was seen that in majority of the cases (60%) menorrhagia was the bleeding type, followed by continuous bleeding in 18.75% cases. Polymenorrhagia was the finding in 13.75% cases, while minimum i.e 2.5% cases had polymenorrhea. While studying the distribution of the cases according to type of diagnosis it was observed that 82.5% cases had dysfunctional uterine bleeding followed by fibroid in 10% cases. While adenomyosis was seen in 2.5% cases and endometrial polyp was seen in 5%.

 Table 4: Distribution According to Histopathological Examination in surgically treated cases

Type of Histopathological Examination	No. of Cases (n=24)	Percentage	
Proliferative Endometrium	10	41.66%	
Secretory Endometrium	5	20.83%	
Cystoglandular Hyperplasia	2	8.33%	
Simple Adenomatous Hyperplasia	2	8.33%	
Atypical Endometrial Hyperplasia	1	4.16%	
Endometrial Polyp	4	16.66%	
Total	24	100%	

On histopathological examination 41.66% cases had proliferative endometrium followed secretory endometrium in 20.83% cases. Endometrial polyp was the finding in 16.66% cases. Cystoglandular hyperplasia and simple adenomatous hyperplasia was present in 8.33% cases each, while minimum only 1 case i.e. 4.16% had atypical endometrial hyperplasia.

DISCUSSION

The present study was conducted in Government Medical College and Hospital, during the period of September 2009 to April 2011, during which 80 cases of abnormal uterine bleeding coming to gynecological out patient department (OPD) and who were in the age group between 40-50 years were studied. In the present study mean age of the cases with perimenopausal bleeding was 43.19±2.57. Mean age of this study is comparable with the study carried out by Dasgupta S. *et al*⁷ and Waleed E^8 et al who found mean age of presentation of the cases in their study as 46.2 years and 46.8±4.5 years respectively. It was observed that perimenopausal bleeding was most prevalent among patients from lower socioeconomic status. In present study majority of the cases i.e. 78.75% were illiterate, while remaining i.e. 21.25% were literate. This suggests that illiteracy and low socioeconomic status go hand in hand with perimenopausal bleeding. Majority of women with abnormal uterine bleeding in perimenopausal age were multipara (91.25%). Which is comparable with study carried out by Kriplani A. et al^9 (93.63%), Dasgupta S. et al^7 (88.5%) and Waleed E. et al^{8} (88%). This suggests that overall multiparity does carry a considerable risk for perimenopausal bleeding. In the present study majority i.e. 60% cases had menorrhagia which was comparable with the study carried out by Muhammad M. et al^{10} , who found maximum i.e. 56.8% cases as menorrhagia. Continuous PV bleeding and metromenorrhagia was reported in 18.75% and 5% cases respectively which was comparable with Reddi RP *et al*¹¹ who observed similar observation (15.3% and 3.8% respectively). These findings suggest that menorrhagia is the most common presenting symptom in perimenopausal bleeding patients. The most common type of pathology in perimenopausal bleeding cases was dysfunctional uterine bleeding. It was followed by fibroid. Similar observations were reported by Knol HM et al^{12} and Muhammad M. et al^{10} In the present study majority of the cases (41.66%) had proliferative endometrium and simple adenomatous hyperplasia in 8.33% cases which was comparable with the study done by Ozdemir S *et al*¹³, who found proliferative endometrium in 37.5% cases and simple adenomatous hyperplasia in 9.1% cases. While in contrary to the present study Muhammad M. et al¹⁰ and Chakraborty S. *et al*¹⁴ found proliferative endometrium in lesser number of cases and simple adenomatous hyperplasia in higher number of cases. Secretory endometrium in present study was found in 20.83% which was lesser than studies conducted by Ozdemir S et al¹³, Muhammad M. et al¹⁰ and Chakraborty S. et al¹⁴. Endometrial polyp in present study was much higher than rest of studies. This difference might be due to differences in study population and age group in other studies.

CONCLUSION

Perimenopausal bleeding is common in multiparous and lower socioeconomic class women. Dysfunctional uterine bleeding is the most common cause of perimenopausal bleeding which present with menorrhagia and proliferative endometrium on histopathological examination.

REFERENCES

- 1. Vilos GA, Lefebvre G, Graves GR. Guidelines for the management of abnormal uterine bleeding. J Obstet Gynecol Can 2001; 23(8):704–9.
- Seltzer VL, Benjamin F, Deutsch S. Perimenopausal bleeding patterns and pathologic findings. J Am Med Womens Assoc 1990; 45:132–34.
- Farquhar C, Ekeroma A, Fentiman G, Lethaby A, Rademaker L. An evidence-based guideline for the management of uterine fibroids. Aust N Z J Obstet Gynecol 2001; 41(2):125–40.
- Lefebvre G, Vilos G, Allaire C, Jeffrey J. The management of uterine leiomyomas. J Obstet Gynecol Can 2003; 128:1–10.
- 5. Albers JR, Hull SK, Wesley RM. Abnormal uterine bleeding. Am Fam Physician 2004; 69 (8):1915–26.

- 6. Brand A, Dubuc-Lissoir J, Ehlen Y, Plante M. Diagnosis of endometrial cancer in women with abnormal vaginal bleeding. SOGC Clin Pract Guidelines 2000; 8:1–3.
- Dasgupta S, Chakraborty B, Karim R, Aich RK, Mitra PK,Ghosh TK. Abnormal Uterine Bleeding in Peri-Menopausal Age: Diagnostic Options and Accuracy. The Journ. of Obstet and Gynecol of India 2011; 61: 189 –94.
- 8. Waleed El-khayat , Mohamed Ehab Sleet, Enas Yassen Mahdi. Comparative study of transvaginal sonography and hysteroscopy for the detection of pathological endometrial lesions in women with perimenopausal bleeding. Middle East Fertility Society Journal 2011; 16:77–82.
- Kriplani A, Singh BM, Lal S, Agarwal N. Efficacy, acceptability and side effects of the levonorgestrel intrauterine system for menorrhagia. International Journal of Gynecology and Obstetrics 2007; 97:190–94.
- 10. Fluhmann CF. Textbook of Menstrual Disorders and Treatment, 1956; p1-4.

- Reddi RP, Lakshmikantha G. Transvaginal Sonography (TVS) and Saline Infusion Sonohysterography (SIS) in the Evaluation of Abnormal Uterine Bleeding (AUB). J Obstet Gynecol India 2010; 60:511-15.
- 12. Knol HM, Bogchelman DH, Kluin-Nelemans HC, Ate G.J. van der Zee, Jan van der Meer, Meijer K. Routine evaluation and treatment of unexplained menorrhagia: do we consider haemo static disorders? European Journal of Obstetrics & Gynecology and Reproductive Biology 2010;152:191–94.
- 13. Ozdemir S ; Çelik C ; Gezginç K ; Kareoi D ; Esen H. Evaluation of endometrial thickness with transvaginalultrasonography and histopathology in premenopausalwomen with abnormal vaginal bleeding. Arch Gynecol Obstet 2010; 282:395–99
- 14. Chakraborty S, Khurana N, Sharma JB, Chaturvedi K U. Endometrial hormone receptors in women with dysfunctional uterine bleeding. Arch Gynecol Obstet 2005; 272:17–22.

Source of Support: None Declared Conflict of Interest: None Declared