International Journal of Clinical Obstetrics and Gynaecology

ISSN (P): 2522-6614
ISSN (E): 2522-6622

www.gynaecologyjournal.com
2018; 2(6): 07-09
Received: 05-09-2018
Accepted: 10-10-2018

Dr. Nandini Malleshappa Hadalagi
Assistant Professor, Department of OBG, SIMS&RC, Bangalore, Karnataka, India

Dr. Rashmi MB
Assistant Professor, Department of OBG, RIMS, Raichur, Karnataka, India

Correspondence
Dr. Rashmi MB
Assistant Professor, Department of OBG, RIMS, Raichur, Karnataka, India

Efficacy of ormeloxifene in the management of DUB

Dr. Nandini Malleshappa Hadalagi and Dr. Rashmi MB

Abstract
Aims and objectives: To establish the role of ormeloxifene in the medical management of DUB.
Materials and Methods: Hundred women with DUB enrolled in the study group and 60mg of ormeloxifene was given orally for three months twice weekly and then once weekly for next three months. The improvement was assessed with increase in the hemoglobin levels and reduction in the endometrial thickness.
Results: The mean hemoglobin level before treatment was 8.56g% and after treatment it was 11.86g% with P value of 0.00 which is very significant. The endometrial thickness before the treatment was 12.01mm and after the treatment the endometrial thickness was reduced to 8.05mm with the P value of 0.00 which is very significant.
Conclusion: Ormeloxifene is an excellent drug in the medical management of DUB with better acceptability and safety.

Keywords: ormeloxifene, management, DUB

Introduction

Dysfunctional Uterine Bleeding (DUB) is a state of abnormal uterine bleeding without any clinically detectable organic, systemic and iatrogenic cause. It is the most common menstrual disorder of women in reproductive age and is a diagnosis of exclusion. It can affect any woman from menarche to menopause, occurring more commonly at extremes of age. Menorrhagia (menstrual blood loss >80 ml per cycle) affects 10-33% of women at some stage in their lives.

Menorrhagia is defined as cyclical bleeding at normal intervals which is excessive in amount (Total blood loss greater than 80 ml) or duration (lasting longer than 7 days). DUB is one of the most common causes of iron deficiency anemia in females after nutritional anemia.

A wide range of treatment modalities are available which include medical therapy and surgical interventions. Medical management of menorrhagia is a challenging task and includes hormonal or non-hormonal agents. Hormonal agents include estrogens, progesterone and combination of the two, androgens, danazol, GnRH agonists and the latest SERMS (Selective Estrogen Receptor Modulators). Non hormonal drugs like NSAIDS, ethamsylate and anti-fibrinolytics have also been found to be highly effective. The ideal therapy in perimenopausal women is one that has no uterine stimulation, prevents bone loss, has no risk of breast cancer, has a positive effect on lipids and cardiovascular system and maintains cognitive function of brain.

Hysterectomy should be the last resort in the management of DUB, because of the morbidity associated with the surgical procedures. The RCOG recommends beginning with medical management before resorting to surgical intervention. The latest of the pharmacological agents that have become available for the treatment of DUB are selective estrogen receptor modulators or SERM.

Ormeloxifene is a Selective Estrogen Receptor Modulator (SERMs) which selectively bind with high affinity to estrogen receptors and act as estrogen agonists in some tissues and estrogen antagonists in others. Ormeloxifene, a third generation SERM, antagonizes the effect of estrogen on uterine and breast tissue and stimulates its effect on vagina, bone, cardiovascular and central nervous system. Thus, it is especially beneficial in perimenopausal women as it has no uterine stimulation, prevents bone loss, does not increase the risk of breast cancer, lowers cholesterol level and maintains cognitive function of the brain. It has the additional advantage of reducing premenstrual symptoms, mastalgia and dysmenorrhea. When ormeloxifene (Centchroman) was used as a contraceptive, its beneficial effect on menorrhagia and endometriosis was observed, which led to controlled trials for the management of menorrhagia after its approval for this indication. The aim of the present study is to assess the efficacy, safety and acceptability of ormeloxifene in the medical management of dysfunctional uterine bleeding.

Aims and objectives

To establish the role of ormeloxifene in the medical management of Patients diagnosed with DUB.

Materials and Methods

The study was conducted for the period of six months. A total of hundred patients who have completed child bearing and are between 35 to 55 years were enrolled in the study. This study was conducted at RIMS Raichur. Detailed history and clinical examination was done to all the patients. Complete blood picture, ultrasound, and gynecological examination was done to all the patients to rule out other pelvic pathology. Systemic diseases like liver disorders, renal disorders, coagulation abnormalities and thyroid disorders were ruled out. Exclusion criteria were pelvic pathologies like uterine fibroid, endometriosis, malignancies of genital tract. Patients suffering with other diseases like liver dysfunction, heart disease were excluded. IUCD or pill users, lactating women in the first 6 months of postnatal period, history of abortion within last 3 months and hypersensitivity to drugs are excluded from the study. Ormeloxifene was given 60mg orally twice weekly for first three months followed by once weekly for next three months. Hemoglobin estimation was done every three months to assess the blood loss. Endometrial thickness was assessed after three months to establish the improvement after treatment with ormeloxifene.

Results

Hundred women were enrolled in the study who are diagnosed with DUB in the pretreatment cycles. Table 1. Shows the clinical profile of the patients. The mean age was 49.02 years and the mean parity was 3.15.

Table 1: Showing clinical profile of patients

Clinical profile of patients	Clinical parameters	Mean (range)	SD
1	Age	49.02	6.80
2	parity	3.15	1.27

Ormeloxifene was given 60mg orally twice weekly for first three months followed by once weekly for next three months. Hemoglobin estimation was done every three months to assess the blood loss. Endometrial thickness was assessed after three months to establish the improvement after treatment with ormeloxifene. The mean Hemoglobin level was 8.56g% before starting the treatment. The mean hemoglobin level increased significantly after the treatment with ormeloxifene. The mean hemoglobin level after treatment was 11.86g% with P value of 0.00 which is very significant. The endometrial thickness before the treatment was 12.01mm and after the treatment the endometrial thickness was reduced to 8.05mm with the P value of 0.00 which is very significant.

Table 2: Showing the outcome of the treatment

Parameters	Pretreatment		Post treatment		P Value
	Mean	SD	Mean	SD	
Hb	8.56	0.51	11.86	0.87	0.00
Endometrial thickness	12.01	0.75	8.05	0.54	0.00

Discussion

Menorrhagia accounts for most of the referrals to the Gynecological OPD and in majority of the cases no organic pathology is identified. DUB reflects a disruption in the normal cyclic pattern of ovulatory hormonal stimulation to the endometrial lining. It is considered a diagnosis of exclusion. Medical management has always been the first therapeutic option to be tried and if it fails to show results, one can resort to surgical interventions. Hysterectomy should be the last resort in the management of DUB. The procedure involves significant post operative complications. Endometrial ablation techniques offer an alternative surgical treatment option with significantly reduced postoperative morbidity. They may be unsuitable for women who wish to retain their menstrual function and the required technical expertise not routinely available.

In our study, there is significant improvement in the hemoglobin levels of the patients. There is significant reduction in the menstrual flow. The endometrial thickness assessed by transvaginal sonography before the treatment was high and it significantly got reduced after treatment with ormeloxifene. These results were comparable with the study conducted by Kriplani *et al.* and Dadich *et al.* [7] Similar to our study, Dhananjay *et al.* found a statistically significant increase in hemoglobin concentration (8.26 to 10.59g/dl, $P<0.001$) and a statistically significant decrease in endometrial thickness (9.83 to 4.89; $P<0.001$) after 3 months of treatment with ormeloxifene [8].

In a study conducted by Ahmed SB *et al*. they found statistically significant reduction in the median PBAC scores, and significant decrease in the endometrial thickness which is comparable to the present study.

Conclusion

Ormeloxifene was found to be an excellent drug in controlling dysfunctional uterine bleeding without effecting normal endocrinal and physiological parameters. Ormeloxifene has better compliance and acceptability with marked relief in symptoms. It is cost effective and has got a simple dosage schedule. It causes significant decrease in the menstrual blood loss and marked improvement in the hemoglobin concentration and a significant reduction in the endometrial thickness. It is oncologically protective for the breast and the endometrium.

Though the study size is small but it highlights the role of ormeloxifene in reducing menorrhagia and avoiding surgeries in the perimenopausal group with better compliance and proper follow up.

References

1. Bravender T, Emans SJ. Menstrual disorders. Dysfunctional uterine bleeding. Pediatr. Clin North Am. 1999; 46(3):545-53.
2. Awwad JT, Toth TL, Schiff I. Abnormal uterine bleeding in the perimenopause. Int J Fertil. 1993; 38:261.
3. Bhatia N. Abnormal and Excessive uterine bleeding. In Neeraj Bhatia editor. Jeffcoate's Principles of Gynecology. 5th Edition. London: Arnold Publishers, 2001, 560.
4. Sharma S, Kaur D, Mahajan A, Tandon V. Selective oestrogen receptor modulators. Asian Journal of obstetrics and gynaecology practice. 2006; 1013:30-6.
5. Higham JM, O'Brien PMS, Shaw RW. Assessment of menstrual blood loss using a pictorial chart. Br J Obstet Gynaecol. 1990; 97:734-39.
6. Biswas SC, Saha SK, Bag TS. Ormeloxifene a selective

estrogen receptor modulator, for treatment of dysfunctional uterine menorrhagia. J Obstet Gynaecol Ind. 2004; 54(1):56-9.
7. Kriplani A, kulshresha V, Agarwal N. The efficacy and safety of Ormeloxifene in the management of Menorrhagia: a pilot study. J Obstet. Gynecol. 2009; 35(4):746-52.
8. Dhananjay BS. Nanda SK. Role of sevista in management of uterine bleeding. Journal of clinical diagnostic and Research. 2013; 7(1):132-34.
9. Sudha Prasad. Centchroman - A novel drug for DUB. J obstet Gynecol Ind. 2000; 50(2).
10. Hallberg L, Nillsson L. Determination of menstrual blood loss. Scand J clin Lab Invest. 1964; 16:244-48.
11. BS D, Nanda SK. The role of Sevista in the management of Dysfunctional Uterine Bleeding. J Clin Diagn Res. 2013; 7(1):132-4.