COMPARATIVE STUDY OF DIFFERENT NON-SURGICAL MODALITIES IN ABNORMAL UTERINE BLEEDING

Fady Mohamed Shawky Moiety, Tarek Mokhtar Toppozada, Zeinab Mahmoud Idris, Ragab Abd EL Fattah Shehata Farag

Department of Obstetrics & Gynaecology , Faculty of Medicine, Alexandria University

Introduction

Abnormal uterine bleeding (AUB) refers to alterations in menstruation characterized by a rise in the quantity, length, or frequency of hemorrhage. Abnormal uterine bleeding has a negative impact on the emotional, physical, sexual, & professional elements of women's lives, hence deteriorating their overall quality of life. The etiologies of bleeding is called PALM-COEIN. Each letter in the acronym represents a specific cause of bleeding: Adenomyosis [A], uterine Polyp [P], Leiomyoma [L], precursor & Coagulopathies [C], Malignant lesions of the uterine body [M], Endometrial dysfunction [E],Ovulatory dysfunction [O], Iatrogenic [I], & Not yet classified [N]. Diagnosis of AUB depends on history, clinical examination and laboratory tests, imaging tests, hysteroscopy, endometrial biopsy and Pictorial Blood Loss Assessment Chart (PBAC). Treatment of AUB includes medical and surgical modalities.

Aim of the work

To compare the efficacy, safety & acceptability of oral tranexamic acid alone or with oral mefenamic acid versus LNG-IUS in cases of abnormal uterine bleeding.

Patients and Methods

This study was a prospective randomized clinical trial conducted on (150) patients with abnormal uterine bleeding, recruited from gynecological outpatient clinics at El-Shatby Maternity University Hospital during the period from November 2022 to July 2023.

Inclusion criteria: Age: 25-45 years old.

Menstrual blood loss ≥ 80 ml or menstrual duration ≥ 8 days or passage of blood clots more than 1 cm.

No history of medical treatment for abnormal uterine bleeding (AUB).

No wish for pregnancy for at least one year.

Negative cervical cytology.

Normal pelvic examination.

BMI ≤ 30 Kg / m².

Exclusion criteria: Local pelvic organic lesions (e.g polyp, fibroid, adenomyosis, malignancy). Pelvic inflammatory disease. Contraindications or hypersensitivity to the drugs to be used. Chronic medical conditions.

Results

Prior to conducting the study, Institutional Review Board (IRB) approval for research ethics and written consent from all cases has been obtained after providing a detailed explanation of the study.

The study has been performed on (150) cases complaining of AUB, they were randomlly divided using Redcap software into three groups:

Group 1: (n= 50) patients were prescribed tranexamic acid 1 gm 3 times daily oral tablet for the first 5 days of menstrual cycle for 3 consecutive cycles.

Group 2: (n= 50) patients were prescribed mefenamic acid five hundred milligrams 3 times daily oral tablet and tranexamic acid 1gm 3 times daily oral tablet for the first 5 days of menstrual cycle for 3 consecutive cycles.

Group 3: (n=50) LNG-IUS was inserted immediately postmenstrual.

Outcome Measurements and Follow-up

All cases have been followed up after one, three and six months following the procedure. **The *primary outcome was include*:** Amount of menstrual blood loss based on number of pads per day and pictorial blood loss assessment. ***The secondary outcomes were include***: Safety and acceptability of the method used. Patient's satisfaction with outcomes. The need for further intervention including hysterectomy.

Table (1): Shows post-treatment means menstrual blood Loss among the studied groups

	Group 1	Group 2	Group 3	p-value
	(Tranexamic acid)	(Tranexamic acid and mefenamic acid)	(LNG-IUS)	
	No. (50)	No. (50)	No. (50)	
MBL (no. of pads /day) Mean ±SD	5±2	4.2±1.8	3.5±1.5	≤0.001*

Table (2): Shows distribution of post-treatment AUB control among the studied groups based on pictorial menstrual blood loss assessment.

	Group 1	Group 2	Group 3	p-value
	(Tranexamic acid)	(Tranexamic acid and mefenamic acid)	(LNG-IUS)	
	No. (50)	No. (50)	No. (50)	
Bleeding control after 1 month				
Yes	19(38%)	24(48%)	29(58%)	0.134
No	31(62%)	26(52%)	21(42%)	
Bleeding control after 3 months				
Yes	23(46%)	28(56%)	36(72%)	0.029*
No	27(54%)	22(44%)	14(28%)	
Bleeding control after 6 months				
Yes	29(58%)	36(72%)	42(84%)	0.015*
No	21(42%)	14(28%)	8(16%)	

Conclusion

Tranexamic acid alone or combined with mefenamic acid and LNG-IUS may be effective and safe options in management of AUB.

Both post-treatment MBL and patient's satisfaction, were better in LNG-IUS followed by mefenamic acid combined with tranexamic acid then tranexamic acid alone.