



POSTHYSTERECTOMY EVALUATION OF AUB FOR CORRELATION WITH FIGO'S PALM COEIN CLASSIFICATION

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ABSTRACT **Introduction:** Abnormal uterine bleeding is the commonest menstrual problem during perimenopause. The aim of the study is to analysis the causes of AUB, high risk factors and clinicopathological correlation in gynaec patients who had undergone hysterectomy.

Methods: A retrospective study was conducted on 85 women who had hysterectomy for abnormal uterine bleeding in the Department of obstetrics and gynaecology, Government medical College & ESIC hospital, Coimbatore.

Results: Abnormal uterine bleeding was more common in multiparous, perimenopausal (68.24%) women. Heavy menstrual bleeding was the commonest complaint. Leiomyoma was the commonest cause of AUB.

Conclusion: The histopathological examination revealed significantly more cases of PALM histopathologically (91.75%) versus clinical PALM of (69.41%). The difference is mainly attributed to detection of more AUB-A, and AUB-A;L. All the cases of AUB-L and AUB-P diagnosed clinically were confirmed by histopathological examination, whereas AUB-O, AUB-E clinically were not confirmed by histopathology.

KEYWORDS : Abnormal uterine bleeding. PALM-COEIN. Histopathology

Introduction:

Abnormal uterine bleeding is one of the common presenting complaints in a gynaec outpatient department.¹ AUB is defined as the bleeding from the uterine corpus that is abnormal in regularity, volume, frequency or duration and occurs in the absence of pregnancy.^{2,3} AUB is more common during perimenopause which is 2-8 yrs before menopause and 1 year after final menses.⁴ Menstrual cycles often become irregular due to decreased number of ovarian follicles and increased resistance to gonadotrophin stimulation resulting in low levels of estrogen which cannot keep the normal endometrium growing.⁵ It has become a major health problem and many develop anaemia which adds to the social and physical morbidities of the perimenopausal women. There are many causes of AUB and without a proper classification it is impossible to arrive at a correct aetiology. FIGO'S PALM-COEIN has nine main categories arranged according to the acronym: Polyp; adenomyosis; coagulopathy; leiomyoma; malignancy and hyperplasia; ovulatory dysfunction; endometrial ; iatrogenic; and not yet classified. This classification helps to investigate thoroughly and guides the gynaecologist regarding management. Thus it helps to reduce the morbidity and improve the quality of life.

Materials and methods:

The aim of our study is to analyse the causes of abnormal uterine bleeding. This is a retrospective study. The case sheets of 85 cases who underwent hysterectomy for AUB were analysed under various parameters like agegroup, parity, socio economic status, riskfactors, cyclepattern, investigations and histopathology examination.

Results:

Table-I. Distribution of cases as per age n=85

Age group	Number	%
≤35	4	4.71
36-40	12	14.11
41-45	31	36.47
46-50	26	30.58
>50 yrs	12	14.11

Table-II Parity (Distribution of Cases as per Parity) n=85

Parity	Number	%
Para 1	6	7.06
Para 2	58	68.24
Para 3 and Above	19	22.35
Nulliparous	2	2.35

Table – III Comorbid conditions n = 85

Comorbid conditions	Number	%
Thyroid Disease	15	17.65
Diabetes Mellitus	4	4.71
Systemic Hypertension	11	12.94
Diabetes Mellitus with Systemic Hypertension	2	2.35
Anaemia	22	25.88
Heart Disease	2	2.35
Bronchial Asthma	4	4.71
Pulmonary Tuberculosis	1	1.17
Family History of Endometrial Carcinoma	1	1.17
Obesity	23	27.06

TABLE - IV Distribution based on AUB Symptomatology n = 85

Symptom	Number	%
Heavy Menstrual Bleeding	52	61.17%
Frequent menstrual bleeding	23	27.06%
Prolonged Menstrual Bleeding	4	4.71%
Normal Cycle	6	7.06%

Table – V Distribution of Cases as per the pattern of histopathology of endometrium n=85

Type of Endometrium	Number	%
Disorderly proliferative	68	80.00
Secretory	13	15.29
Atrophic	3	3.53
Adenocarcinoma	1	1.17

TABLE –VI Correlation of Clinical and histopathology based diagnosis

Category	Clinical PALM n=59 (69.41%)	Histopathology PALM n=78(91.75%)	Pvalue
AUB –P (Polyp)	3.53%	3.53%	> 0.05(NS)
AUB – A(Adenomyosis)	5.88%	18.82%	0.01(S)
AUB – A;L (Adenomyosis and leiomyoma)	3.53%	12.94%	0.025(S)
AUB – L (Leiomyoma)	56.47%	55.29%	0.88 (NS)
AUB – M (Malignancy and hyperplasia)	0	1(1.17%)	
AUB-O(Ovulatory Disorders)	COEIN n=26 (30.58%) 16.47%	COEIN n=7 (8.24%) 3.53%	0.004 (S)
AUB – E(Endometrial)	14.11%	4.71%	0.035(S)

In our study majority belonged to age group (41 – 45 yrs (36.47%) and 30.59% belonged to 46-50yrs.(Table – 1).Most of the cases were multiparous of which 58 (68.24%) were para 2 and 19 (22.35%) were para 3 and above. (Table - 2) Among the risk factors obesity was 23 (27.06%) anaemia 22 (25.88%) SHT 11(12.94%) and thyroid 15 (17.65%). (Table - 3) The most common symptom was heavy menstrual bleeding 61.17%. (Table-4) Endometrialhistopathology showed disordered proliferative endometrium 68(80%). (Table 5).

Discussion:

In our study, majority belonged to the age group 41-50yrs and were multiparous which is similar to the studies done by Prema et al.⁸ lotha et al.⁹ Majority (97.64%)belonged to low socioeconomic status.The most common clinical presentation was heavy menstrual bleeding 61.17% similar to Jonathan et al.⁷ priyankaet al¹⁰

In our study we had 3.52% polyps but in Jonathan et al it was 15%.⁷ Since all were found to be fibroid polyps, there was no change in histopathology, (p value>0.05) and not significant.

In AUB –L the difference in clinical and histopathology diagnosis was not significant (p>0.05).This is because most fibroids were symptomatic and easily diagnosed by clinical and ultrasound examination. In AUB (Adenomyosis) and AUB (A;L) the difference in clinical and histopathological diagnosis was significant (p<0.05). This is because the symptoms and signs can be so similar for adenomyosis and leiomyoma making clinical differentiation difficult .Our observation is similar to devanshi et al.⁶.

In AUB –E, the difference in clinical and histopathology diagnosis was significant (p<0.05).The clinically assigned cases were more because they had no definable cause of AUB. Since no validated tests are there to confirm diagnosis clinically, histopathology only is confirmatory.

Conclusion:

In our study, PALM component 69.41% contributed more than COEIN when assessed clinically. Histology also revealed more cases of PALM 91.75%. This was due to more AUB-A, AUB-A;L cases detected by histopathology.

Devanshi et al and our study almost similar regarding PALM COEIN correlation except for Ovulatory disorder. Clinically diagnosed ovulatory disorder and endometrial disorder were found to be AUB-A and AUB A;L on histopathological examination in our study. This could be due to the overlap of structural causes which also caused infrequent, irregular menstrual bleeding. In our study there is a redistribution histopathologically from functional [COEIN] to structural [PALM] group. This signifies further research in the investigations and management of ovulatory and endometrial disorder. Thus, FIGO's PALM – COEIN classification gives a better way of classification of aetiology of AUB and its management.

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