



A Study of Correlation of Etiological and Histopathological Findings in Females Undergoing Hysterectomy for Abnormal Uterine Bleeding - in Accordance with Palmcoein Classification

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ABSTRACT

Objective: : To find out the proportion of various causes of AUB in females undergoing hysterectomy in accordance to the classification system PALM COEIN proposed by FIGO .

Method:Data was collected from the case records of females who underwent hysterectomy for AUB in the study period. The study included all women who underwent planned abdominal hysterectomy..The histopathologic findings were also analysed so as to find out the proportion of various causes of AUB in females undergoing hysterectomy

Results A total of 438 gynaecological hysterectomies were performed in the study period 2012-2014. Out of these 356 (81.3%) were total abdominal hysterectomies with or without bilateral salpingoophorectomy and 82 (18.7) were vaginal hysterectomies. 253 hysterectomies were done for cases of AUB which amounts to 73%.. The commonest histopathological diagnosis made was that of AUB-L in 43.7% cases , followed by AUB-O.

Conclusion. .In our study we could classify the specimens according to PALMCOEIN, and find out the relative proportions of each causes. Such studies will help in providing data for comparative and epidemiological studies in various populations. More studies need to be conducted for finding out the causes of the increased prevalence of leiomyoma in the region.

KEYWORDS

etiologic, histopathology, abnormal uterine bleeding, hysterectomy

Abnormal uterine bleeding (AUB) is defined as any change in the frequency of menstruation, duration of flow or amount of blood loss. AUB is a common problem encountered by women of all age groups, responsible for around 20-30% visits to out patient department in reproductive age group and 69% in peri or postmenopausal age group. The International Federation of Gynaecology and Obstetrics working group on menstrual disorders has developed a classification system-PALM COEIN for causes of AUB in non gravid women of reproductive age(1) . The classification system is stratified into nine basic categories that are arranged according to the acronym PALM-COEIN [pahm-koin]: Polyp, Adenomyosis, Leiomyoma, Malignancy and hyperplasia, Coagulopathy, Ovulatory Disorders, Endometrium, Iatrogenic, and Not Classified.

A number of minimally invasive surgical alternatives for hysterectomy do exist now and are promising like endometrial ablation, thermal balloon therapy and uterine artery embolisation but restricted availability and cost factor limit them from being widely used.[2] Therefore, hysterectomy still remains the widely accepted and practiced treatment of choice.

Our study aims to find out the proportions of various etiological factors responsible for AUB in the subjects undergoing hysterectomy in accordance with the PALMCOEIN classification proposed by FIGO.

OBJECTIVE: To find out the proportion of various causes of AUB in females undergoing hysterectomy in accordance to the classification system PALM COEIN proposed by FIGO.

METHODOLOGY

STUDY SETTING: :OBG Department, Malabar Medical College.

POPULATION: Females who underwent hysterectomy for AUB in the study period

STUDY PERIOD: From MAY 2012-MAY 2014, 2 years

METHOD:Data was collected from the case records of females who underwent hysterectomy for AUB in the study period. The study included all women who underwent planned abdominal hysterectomy. Data was recorded on proformas, including demographic characteristics and clinical features. Only one dominant diagnosis was considered and documented as the indication for the procedure. The histopathologic findings were also analysed so as to find out the proportion of various causes of AUB in females undergoing hysterectomy in accordance to the classification system PALM COEIN proposed by FIGO .

STATISTICAL ANALYSIS: The data was analyzed in SPSS 15.0 for windows evaluation version (SPSS Inc. 1989-2006).

RESULTS

A total of 438 gynaecological hysterectomies were performed in the study it's -period 2012-2014. Out of these 356 (81.3%) were total abdominal hysterectomies with or without bilateral salpingoophorectomy and 82 (18.7) were vaginal hysterectomies. 253 hysterectomies were done for cases of AUB which amounts to 73%. Most of the patients were in the age group 41-50 years (Table 1) and 65.9% had parity of two.

Table 1 : Age wise distribution undergoing hysterectomy for AUB (n=253)

Age (years)	No.	%age
36 – 40	35	13.8
41 – 45	62	24.5
46 – 50	114	45
>50	42	16.6

Table 2: Parity of patients undergoing hysterectomy for AUB (n=253)

Parity	No.	%age
P1	52	20.6
P2	166	65.9
≥ p3	34	13.4

The most common presenting complaints were heavy menstrual bleeding followed by IMB.Preoperative diagnosis of fibroid was made in 90cases(35%).Ovulatory disorders in six-tysix cases(26%)., adenomyosis was suspected in 28 patients (11%) (Table 3).

Table 3: Prep-op-diagnosis n=253

Indication	No.	%age
Fibroids	90	35.5
Ovulatory dysfunction	86	33.9
Chronic PID	11	4.3
Adenomyosis	28	11.1
Endometriosis	27	10.6
Cervical dysplasia	9	3.5
Carcinoma endometrium	2	0.7

The commonest histopathological diagnosis made was that of fibroid uterus in 43.7% cases (Table 4). Chronic cervicitis (62%) was an incidental finding in most of the cases

Table 4: Spectrum of histopathological diagnoses (n=253)

Histopathological diagnosis	No.	%age
POLYP	5	1.9
Adenomyosis	23	9.1
Leiomyoma	112	44.2
Malignancies and hyperplasias	11	4.3
Coagulopathy	0	0
Ovulatory dysfunction	57	22.5
Iatrogenic	2	0.8
Endometrial	43	17

DISCUSSION.

Hysterectomy is a major surgical procedure which involves the total removal of the uterus with or without the fallopian tubes and ovaries.It provides definitive cure to many diseases involving uterus as well as adnexae, eg.,fibroids, DUB, adenomyosis, endometriosis, pelvic inflammatory disease, pelvic organ prolapse and malignancy. In developed world focus is increasing on minimally invasive management options for benign gynecological diseases such as endometrial ablation, thermal balloon therapy, uterine artery embolization or levonorgestrel releasing intrauterine system, laparoscopic hysterectomy, or robotic surgery.However, the condition is exactly opposite in developing countries, especially in rural areas. Due to limited resources available, women usually present very late to health care facility and desire a permanent cure to their disease at the cheapest rates available.

Abnormal uterine bleeding is a common complaint in females undergoing hysterectomy.FIGO has come up with the PALM-COEN classification for AUB in women,the main purpose of which is to facilitate investigators to study homogenous populations of patients experiencing AUB and to make it easy to compare studies performed by different investigators or research groups.

Age and parity are factors usually considered before

hysterectomy is performed. The peak age for the procedure in our study was the fourth decade (41–50) as has been observed in many other studies.The average parity in our study was two with a range of 0-5.Almost similar result was obtained in the studies by LeeNC found a mean parity of 3.1(3).

In our study 73% of females undergoing hysterectomy had complaints of AUB. Shergill SK found that abnormal menstrual flow was the commonest complaint seen in 66% cases undergoing hysterectomy.(4)

AUB -L was the commonest indication for hysterectomy in many studies and this was our observation as well- AUB O ranked second in our indications while adenomyosis was third in number. Adenomyosis was suspected in 23 patients (3.9%). Similar results were seen by Jaleel et al .(5)

When histopathological reports were reviewed in this study, chronic cervicitis was the most common incidental finding and many hysterectomy specimens showed more than one type of pathology.The commonest co existent pathologies were AUB L, A AND AUB L, O.Similar results were obtained by other studies.

Our study showed that fibroid was the most common histopathological diagnosis. This is in conformation with other studies. Sobande AA also found that fibroid was the most common pathology seen in 25.8% of hysterectomy specimens followed by Adenomyosis (22.7%)6. Clarke A has reported the commonest indication to be DUB (58%), followed by fibroids (23.2%).(7)

AUB O was the second commonest histopathological diagnosis,followed by AUB E 17%.This may be due to the inclusion of both the chronic PID cases as well as the patients with findings of secretory endometrium in this group.Next in list was AUB A accounting for 3.9% of patients . Endometrial histopathology of specimens showed proliferative phase, secretory phase or atrophic endometrium.

We found that majority of preoperative diagnoses of our cases were confirmed on histopathology. The exception was patients with dysfunctional uterine bleeding in whom pathology like adenomyosis or small fibroids were found on histopathological specimens. Similar results have been reported by others.(4.8.9)

CONCLUSION.

In spite of the availability of a number of options of medical treatment and conservative surgeries, hysterectomy still remains the widely used and definitive treatment modality for AUB in developing as well as the developed countries.In our studyThis study suffers from the flails of other single hospital-based studies. However this study provide baseline data to follow the trend of the hysterectomy operations and put insight to the corresponding histopathological findings in the studied population. we could classify the specimens according to PALMCOEN,and find out the relative proportions of each causes.Such studies will help inproviding data for comparative and epidemiological studies in various populations.More studies need to be conducted for finding out the causes for the increased prevalence of leiomyoma in the region.

REFERENCES

1. Munro MG, Critchley HO, Broder MS, Fraser IS, FIGO Working Group on Menstrual Disorders. FIGO classification system (PALM-COEN) for causes of abnormal uterine bleeding in nongravid women of reproductive age. Int J Gynaecol Obstet 2011;113:3–13. [2. Bhosle A, Fonseca M. Evaluation and histopathological correlation of abnormal uterine bleeding in perimenopausal women. Bombay Hosp J. 2010;52:69–72.. [3. Lee NC, Dicker RC, Rubin G, Oray HW. Confirmation of the pre-operative diagnosis for hysterectomy.Am J Obstet Gynecol 1984;150(3):283-287. [4. Shergill SK, Shergill HK, Gupta M, Kaur S. Clinicopathological study of hysterectomies. J Indian Med Assoc 2002;100(4):238-239,246. [5. Jaleel R, Khan A, Soomro N. Clinicopathological study of abdominal hysterectomies. Pak J Med Sci 2009;25:630-4. [6. Sobande AA, Eskander M, Archibong EI, Damole IO. Elective hysterectomy: a clinicopathological review from Abha catchment area of saudia Arabia. West Afr J Med 2005;24:31-5. [7. Clarke A, Black N, Rowe P, Mott S, Howle K. Indications for and outcome of total abdominal hysterectomy for benign disease: a prospective cohort study. Br J Obstet Gynaecol 1995;102:611-620. [8. Perveen S, Tayyab S. Clinicopathological review of elective abdominal hysterectomies. J Sur Pak2008;13:26-9. [9. Bashir R, Perveen Z, Sultana R, Khan B. A two year audit of complications of hysterectomy at Ayub Teaching hospital Abbottabad. J Ayub Med Coll Abbottabad 2005;17:47-