

Study of Clinical Profile of Patients undergoing Hysterectomy for Abnormal Uterine Bleeding in a Tertiary Care Centre: A Retrospective Study

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Conflict of interest: Nil

Abstract:

Introduction: AUB is the most common cause for which women seek medical help and presents to Gynaecology OPD. About one third of women experience AUB once in their lifetime. Globally, its prevalence in the reproductive age group is 3 to 30%.

Aims and Objective: To analyse the histopathological outcome of patients undergoing hysterectomy for AUB.

Methods and Methodology: It is a hospital based retrospective study conducted in Assam Medical College & Hospital for a period of 3 months from 1stDecember2023 to 29th February2024. Data for women who had undergone hysterectomy for AUB were traced from the Gynaecology OT register. Subsequently the case records of these patients were collected from the medical records department. Demographic data, relevant history and key examination findings were obtained from each of the case file. Where possible, relevant imaging and endometrial biopsy reports were also collected. Histopathological reports of post-operative specimens were gathered from the pathology department.

Results: Most of the patients were in the age group of 41-45years comprising 45% and were multiparous. 55% were with parity 3and above. About 45% presented with heavy menstrual bleeding as the main complaint. It was seen that in 57.5% the post-operative histopathological specimen showed Leiomyoma.

Conclusion: Hysterectomy is one of the common gynaecological surgical interventions done for AUB. Unnecessary hysterectomy adds to the morbidity. Procedures which preclude hysterectomy should be adopted.

Keywords: Abnormal Uterine Bleeding, Leiomyoma, Adenomyosis, Hysterectomy.

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Introduction

Uterus undergoes cyclical changes under the influence of Hypothalamus-Pituitary-Ovarian axis, resulting in cyclical bleeding in the women of the reproductive age group. Common cause is Abnormal uterine bleeding (AUB) which seeks medical attention.

AUB has a global impact with a prevalence of 3% to 30% in the reproductive age group.[1] [2] Prevalence varies from country to country. In India, the prevalence is around 17.9%

AUB is defined as any deviation from normal menstrual cycle which includes changes in frequency, regularity, duration and volume of flow.[3] About one third of women will experience AUB once in their lifetime and more often during menarche and that during perimenopause. AUB can be divided as acute AUB where immediate

intervention is required to prevent blood loss and chronic AUB where irregularity in menstrual bleeding occurs for the majority of the preceding 6 months. [1] The popular classification of nongestational causes of AUB was introduced by FIGO (International Federation of Gynaecology and Obstetrics) in 2011 and revised in 2018 [1][2]The causes of nongestational AUB have been classified into nine categories arranged according to the acronym PALM-COEIN, including the structural causes ("PALM"): polyp, adenomyosis, leiomyoma, malignancy/hyperplasia, and non-structural causes ("COEIN"): coagulopathy, ovulatory dysfunction, endometrial, iatrogenic, and "not otherwise classified"[1][2][4][5] Therapeutic management for AUB are either medical or procedural or surgical [6]. Hysterectomy is one of the most common surgical procedures in the field

of gynaecology.[7] In our college, such study was not done till date, although related studies have been done.

Aims and Objective: To analyse the clinical characteristics and histopathological outcome of the patients undergoing hysterectomy for AUB.

Materials and Methods:

This was a Hospital based Retrospective study conducted at Assam Medical College from 31stDecember2023 to 29th February2024. Data for women who had undergone hysterectomy for AUB were traced from the Gynaecology OT register.

Subsequently the case records of these patients were collected from the medical records department. Demographic data, relevant history and key examination findings were obtained from each of the case file. Where possible, relevant imaging and endometrial biopsy reports were also collected. Histopathological reports of post-operative specimens were gathered from the pathology department. , Clinical symptoms with which she presented , Menstrual history regarding Cycle, Duration of flow, Amount of flow by asking the number of times needed to change the pad in 24hrs, Passage of any clot, any associated pain abdomen was asked. History regarding any co-morbidities, any intake of Oral Contraceptive Pills, any history of LTO was documented; history of any surgical procedure in the past. General physical

examination and systemic examination along with per abdomen, per speculum, per vaginal examination was done after taking consent.

Inclusion Criteria:

1. Women in the reproductive age group or perimenopausal age group undergoing hysterectomy for AUB during the study period.
2. Women whose histopathological reports of post-operative specimens were available.
3. Slide review done by senior pathologists.
4. Women with normal PAP screening reports.

Exclusion Criteria:

1. Women who had undergone Hysterectomy in a different centre but were admitted with us in the post-operative period and required re-laparotomy.

The statistical data was entered in MS Excel. The categorical data were computed as Proportions and the numerical data were computed as Mean.

Results

The number of women who underwent hysterectomy for AUB during the specified period was found to be 40. Around 30 of them underwent endometrial biopsy and 29 were reported as Proliferative endometrium and 1 sample was reported as endometrial hyperplasia.

Table 1: Age distribution of the subjects undergoing hysterectomy for AUB (n=40)

Age (in years)	Number	Percentage
35-40	7	17.5
41-45	19	47.5
46-50	14	35
TOTAL	40	100

In our study, majority were in the age group of 41 to 45 years i.e.47.5%. The mean age was found to be 42.7years.

Table 2: Parity distribution of the subjects undergoing hysterectomy for AUB

Parity	Number	Percentage
NULLIPARA	2	5
PARA1	4	10
PARA2	12	30
PARA3 and above	22	55
TOTAL	40	100

In our study, 50.54% had parity of 3 and above.

Table 3: Presenting clinical symptoms among the subjects

Symptoms	Number	Percentage
Heavy menstrual bleeding	18	45
Dysmenorrhoea	5	12.5
Intermenstrual bleeding	1	2.5
Irregular menstrual bleeding	6	15
Prolonged menstrual bleeding (>8days)	4	10
Frequent menstrual bleeding (<24days)	6	15
Total	40	100

In our study, Majority of the patients presented with Heavy menstrual bleeding which comprised of

45%. Almost all patients had undergone medical management for Heavy and prolonged menstrual

bleeding for at least 3 months. Surgical management with hysterectomy was planned in cases of failed medical management or when patients declined continuation of the same. The

medical management preferred were-Progestogens, Anti-Progestins, OCPs, NSAIDs with Tranexamic acid. None of the patient agreed for LNG IUS if found to be eligible.

Table 4: Pre-operative diagnosis (based on clinical, endometrial biopsy and radiological findings)

Pre-operative Diagnosis	Number	Percentage
Leiomyoma	20	50
Adenomyosis	15	37.5
Polyp	2	5
Malignancies	1	2.5
Endometrial hyperplasia	2	5

Table 5: Post-operative diagnosis as per histopathological report of the subjects

Histopathological diagnosis	Number	Percentage
Leiomyoma	20	57.5
Adenomyosis	10	25
Polyp	2	5
Malignancies	1	2.5
Both leiomyoma and adenomyosis	5	12.5
Endometrial hyperplasia	2	5
Total	40	100

In the study, 57.5 % had Leiomyoma, 25% had Adenomyosis, and 5% had endometrial hyperplasia. The patient who was preoperatively diagnosed to have endometrial hyperplasia was post operatively found to have Endometrial carcinoma stage1A (Old FIGO staging)

In our study, out of the 40subjects, 12required blood transfusion pre operatively and 2 required post operatively and 5 patients required both pre-and post-operatively.

Discussion:

During the 3 months period, Total of 78 hysterectomies was performed, out of which 40 were done for AUB. Rest included-Vaginal hysterectomy for prolapse; hysterectomies done for other malignant causes.

In our study, Table1 shows that 47.5% patients belonged to the age group 41-45years followed by 35% in 46-50yrs. This can be compared with the following studies- Radhika K et al,2019[8] in their study found that majority were in the age group of 41-50 years and comprising 42.3%. Surya Kumari KI et al, 2019 [9] in their study found that majority were in the age group of 40-49years comprising 59%. Mahajan K et al, 2020 [10] in their study found that ≤45yrs comprised of 73.2%. Parvathaneni S, 2022[7] found that majority were in the age group of 41-50years comprising 37%. Sree S et al, 2023[8] in their study found that 35-40 years comprised of 57%.

In our study Table 2 shows that 55% belonged to Parity3 and above followed by 30% with Parity2. Radhika K et al, 2019 [8] in their study found that 53.33% belonged to Parity 2 Parvathaneni S, 2022 [11] in their study found that 58% were of Parity 2

and 17% were of Parity3 Table3 of our study shows that, 45% of the subjects presented with heavy menstrual bleeding followed by 15% with frequent menstrual bleeding; 10% of the subjects had prolonged menstrual bleeding and 12.5% had dysmenorrhoea.

Radhika K et al, 2019 [8] in their study found that the most common clinical presentation was HMB (Heavy menstrual bleeding) accounting for 48.89%. Surya Kumari KI et al, 2019 [9] found that Heavy Menstrual Bleeding was found in 81% of the subjects. Parvathaneni S, 2022[11] found that 47.6% presented with Heavy menstrual bleeding. MahajanK et al,2020[10]in their study found that 39.5% presented with heavy menstrual bleeding.

Table 4 in our study shows that 50% were diagnosed as Leiomyoma preoperatively and 37.5% as Adenomyosis. Radhika et al,2019[8] in their study found that 46.47 were diagnosed as leiomyoma and 23.3% as adenomyosis preoperatively. Table5 shows that, in the present study post hysterectomy, 57.5% showed Leiomyomatosis in histopathology and 25% showed Adenomyosis. Radhika K et al, 2019 [8] found that in histopath 46.67% were reported as leiomyoma 23.33% as Adenomyosis. MahajanK et al, 2020[10] found that 65.1% were reported as Leiomyoma and 15.1% as adenomyosis. Parvathaneni S, 2022[11] found that 41% were reported as Leiomyomatosis and 25.4% as Adenomyosis. Sree S et al, 2023 [12] found that 64% were reported as Leiomyomatosis and 15% as adenomyosis.

In the present study it was seen that 12 patients required blood transfusion preoperatively; 2 required postoperatively and 5 required both pre

and post operatively comprising 47.5% requiring transfusion. This can be compared with Elfazari et al, 2022 [13] where it was found that 2.7% required blood transfusion during hysterectomy for gynaecological cases and highest was in cases of uterine fibroid.

Conclusion:

As found in our study, majority of the patients belonged to the age group of 41-45 years comprising 47.5%, and majority of them were diagnosed as Leiomyoma (50% preoperatively and 57.5% post operatively) and Adenomyosis (37.5% preoperatively and 25% postoperatively)

Unnecessary hysterectomy adds to the morbidity in terms of physical and mental well-being. Some women also undergo oophorectomy in unavoidable circumstances leading to surgical menopause. Women who are ideal candidates for LNG-IUS insertion should be counselled regarding its safety and efficacy. Other advanced procedures should be adopted where facilities are available.

These procedures which preclude hysterectomy comprise of uterine artery embolization, Myomectomy, Endometrial ablation, MRgFUS (Magnetic resonance –guided focussed ultrasound surgery)

Lastly, menstrual hygiene and education regarding normal menses and when to seek medical help should be explained at grass root level with the help of ASHA workers or such other health worker, so that the women may attend hospitals at an early stage where medical management would be successful and not at a stage where we are left only with the option of Hysterectomy.

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