ORIGINAL ARTICLE

The Prevalence of Significant Pathology in Women Presenting With Abnormal Uterine Bleeding

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ABSTRACT

Aims: To detect the Prevalence of Endometrial Carcinoma in women presenting with Abnormal Uterine Bleeding in Peri-menopausal Age and to reduce the iatrogenic hysterectomy done for benign endometrial pathology.
Study design: A Cross-sectional Study.
Setting: The study was conducted in OB/GYN Unit II Sir Ganga Ram Hospital Fatima Jinnah Medical University, Lahore from 1st January 2014 to 31st December 2015; one year study.
Methods: 132 cases **of** hysterectomy specimens were analyzed alter Total Abdominal Hysterectomy +/- Bilateral Salpingo-ophorectomy..The specimens were routinely processed and stained with hemotoxylin and eosin slides were studied under Electron Microscope by the Histopathology Department of Fatima Jinnah Medical University.
Results: The Mean age of patients was 47.5 years (SD+/-4) 132 patients (74%) of cases were from peri-menupausal age group. The most common presenting complaint was menorrhagia 71 patients (56.06%) followed by irregular bleeding in 16 patients (12.12%) and post-menopausal bleeding 13 patients (9.84%) . Proliferative endometrium was found In 74 patients (37.87%) was the predominant histopathology pattern followed by hormonal induced simple endometrial hyperplasia 13 cases (9.84%). Atrophic endometrium 5 cases (4.23%) Endometrial carcinoma was diagnosed in 03patients (2.27 %).
Conclusion: Abnormal Uterine Bleeding should be properly evaluated in peri-menupausal and postmenopausal women to rule out Organic cause.
Carcinoma Endometrial has an excellent prognosis (81.7% at 5 year survival) if detected early thorough histopathology work up and clinical suspicion.
Keywords: Abnormal uterine bleeding, hyperplasia, histopathology, endometrial carcinoma.

INTRODUCTION

Menstruation is the physiologic shedding of the endometrium associated with uterine bleeding normal menstrual cycle varies from 3-5days and cycle length from 22-34 days[1]. Normal menstruation is defined as (bleeding from secrete)• endometrium associated with anovulatory cycle, not exceeding a length of five days". Any bleeding not fulfilling these criteria is referred to as abnormal uterine bleeding. It is said to be abnormal when the pattern is irregular abnormal duration (>7days), or menorrhagia or abnormal amount (> 80ml)[3].

Abnormal uterine bleeding is the Common presenting complaint in Gynaecology Outpatient Department at all age groups. It is due to the an-ovulatory cycles in adolescent and pen-menopausal age group women. Abnormal uterine bleeding is divided into organic and non-organic causes. Histopathology examination of endometrial sample remains the gold standard or diagnosis of endometrial pathology during climacteric .The menstrual cycles become irregular due to failure of Progesterone and an ovulation.)[4]. Medical conditions like Hypothyroidism and abnormal liver functions may present with abnormal bleeding pattern. The tent Dysfunctional Uterine Bleeding is diagnosis of exclusion when there is no underlying medical pathology[14]. The lifetime risk of carcinoma endometrium is 2.8% based on SEER statistics 2010-2012. It is the fourth cancer in frequency after Bladder. Breast in female. Colon according to 2012 statics. The risk increases with age with highest risk in postmenopausal women. The number of deaths is 4.41100,000 women per year. Endometrial carcinoma is estrogen dependent being higher with elevated estrogen levels, obese diabetics. Unopposed estrogen polycystic ovarian syndrome. woman not taking hormone replacement therapy that bleeds after the menopause has a 10%-45% risk of having endometrial carcinoma.

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PATIENTS AND METHODS

An analysis of histopathology report for hysterectomy specimens of 150 women presenting with abnormal uterine bleeding was done in Obstetrics & Gynaecology Unit II, Sir Ganga Ram Hospital for a period of one year. The age range of patients was from 41-65 years (mean age 47.5 years). A careful history of the patient including women's age, parity, menstrual cycle, hormones intake was recorded on a specially designed proforma. Socioeconomic status of the patient was also recorded .Family history of Breast Colon and Endometrial Cancer was taken. Relevant findings of general and systemic examination were recorded. Trans- vaginal ultrasound and endometrial sampling was done in all patients. Hysterectomy was done for various indications and the histopathology reports were analyzed using SPSS version 2010. Chi square test of significance was applied and p value< .05 was taken as significant.

RESULTS

132 women underwent total abdominal hysterectomy with or without oophorectomy during the study period. The main indication was abnormal uterine bleeding. Histopathology reports were analyzed. The mean age of patients was 47.5 years (SD+/- 4).

Fig 1: Distribution of histopathology of hysterectomy specimens

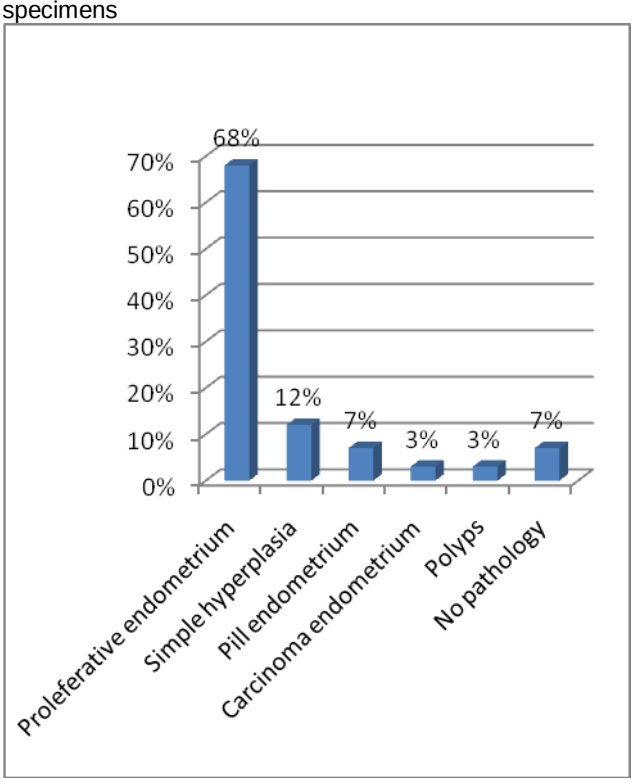

Table 1: Age distribution of case of abnormal uterine bleeding

Age of patients	n	%age
40-45 Yrs	71	53.78
46-50 Yrs	32	36.32
51-55 Yrs	07	5.30
55-60 Yrs	05	3.78
60 Yrs >	01	0.81
Total	100	100

Table 2: Histopathologic findings of hystrectomy

Histopathlogic findings	n	%age
Proliferative phase	74	56.06
Simple/ complex hyperplasia	13	9.84
Harmonal imbalance	5	4.23
Atrpohic endommetrium	3	2.27
Carcinoma endometrium	3	2.27
Chronic endometritis	2	1.52
No pathology	8	6.6

DISCUSSION

Irregular Uterine Bleeding is the most frequent presentation in Gyneacology OPD. It is usually attributed to intrauterine source, like fibroids. polyps ,but may arise from the cervix, related to ovarian pathology. Endometrial hyperplasia account for only 2.25 percent as reported in literature[3,4]. Majority of the cases of the bleeding is due to proliferation of endometrium under the changing hormonal environment of peri-menopausal age and an-ovulation. Medical problems like Hypothyroidism and liver and coagulation abnormalities account for a small number of cases.

Hormonal treatment account for majority of the histopathology report of pill endometrium. Yet hysterectomy is chosen as the preferred and definitive treatment around peri-menopausal age . This study was conducted to highlight over enthusiastic use of hysterectomy option leaving behind the conservative medical options; Conjugated equine estrogen, COCP, Medroxyprogesterone acetate, Tranexamic Acid, GnRH analogues, Danazol. Progesterone oral as well as Intrauterine system. (Mirena). Mirena is found very effective in heavy menstrual bleeding provided organic pathology is ruled out.

Pre-malignant lesions such as atypical endometrial hyperplasia was found in 1.24% cases. out of 10.92% total[5]. Literature search reveals approximately 20-25% cases of hyperplasia with atypical endometrium. Some women have a concomitant endometrial carcinoma and or may develop carcinoma if left untreated[6]. This may account an increasing trend towards definitive treatment for perimenupausal bleeding.

The Endometrial Carcinoma was found in 2.48% patients with most common histological subtype of Endometriod carcinoma (80.09%) followed by Papillary Serous carcinoma (19.1%) in the rest of these patients. This frequency is same as reported in literature with no change[7,8].

Several recent studies have also shown that women with type 2 diabetes mellitus and hypertension are at increased risk of endometrial carcinoma 18.91% in one study[10]. .High carbohydrate diet and insulin resistance and elevated levels of insulin like growth factor may play a role in endometrial proliferation and development of endometrial carcinoma[[9,10]. Trans-vaginal scan has a high sensitivity in detecting endometrial carcinoma 96-98% reported in literature[12].

In this study the most common benign histopathology of endometrium was atrophic endometrium (4.23%) followed by chronic endometritis (1.52%). These findings have also been observed in previous studies. One possible explanation for this atrophic endometrium and endometritis in postmenopausal bleeding is the fragile vascular support provided by thin underlying stroma resulting in superficial petechial and mucosalulceration and probably superimposed infection[10].

Proliferative endometrium was observed in (66.73%) of cases which was higher than reported in literature[11]. This could be due to hormone replacement therapy used by peri-menopausal age women Estrogen alone results in proliferation of endometrium which sheds irregularly due to the absence of Progesterone due to an ovulation. Addition of Progesterone either as Intrauterine systems or topical patch may help save the uterus and avoid hysterectomy. The most common age group of the patients is 41- 50 years which points towards reduced follicle stimulation by increased levels of gonadotropins and reduced ovarian hormones.

Endometrial polyps and fibroids account (22.7%) case of benign endometrial pathology which could be managed with conservative surgery or hysterctomy. WHO classify Hyperplasia of endometrium into four types; simple hyperplasia with or without atypic and complex hyperplasia with or without atniia. In our study hyperplasia accounts for 10.92% cases of abnormal uterine bleeding which is the same as reported in literature[12].

Atrophic endometrium comprised of 09 cases (4.23%) cases of AUB and was most common in the postmenopausal women(6.93%)its incidence varies from 4--7% in literature[13]. The exact cause of bleeding in atrophic endometrium is not known. It is thought to be due to anatomic vascular variations or local abnormal defective local haemostatic mechanisms.

Management of abnormal uterine bleeding: All AUB should be evaluated by CBC, Pregnancy TEST, PT/APTT, serum Fibrinogen, von Willibrand disease, Factor VIII young patients plus TSH, LFTs, Chalamydia antibodies. [ACOG] Management depends upon patient choice, Harmonal or Tranxamic Acid is reserved for failure of medical treatment, non-compliance and desire for fertility.

CONCLUSION

Abnormal Uterine Bleeding is the most common Gynaecological presentation in OPD. Majority of irregular bleeding patients have a benign pathology and should be treated conservatively. A number of hormonal and non-hormonal treatments are available.

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