ORIGINAL ARTICLE

Endometrial Pathology by Endometrial Curettage in Menorrhagia in Premenopausal Age Group Background

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ABSTRACT

Aim: To find out the endometrial pathology by endometrial curettage in patients having menorrhagia in premenopausal age group

Methods: This is a prospective descriptive study conducted in Nawaz Sharif Social Security Hospital Lahore, in gynecology and obstetrics department from January 2013 to June 2013.

During this study 35 patients with menorrhagia in age group 35 to 50 years were selected after fulfilling the inclusion criteria. Patients were selected from gynecologyout patient department, Performa was designed which included detailed history, examination and ultrasonography. Patients were admitted and diagnostic dilatation and curettage done, endometrial sample was taken and sent for histopathology department to find out the endometrial pathology

Results: The selected patients of my study with menorrhagia were in the age range of 35 to 50 years. The analysis of histopathology report of endometrial curetting showed proliferative phase endometrium in 46%, cystic hyperplasia in 12% and in six percent of cases endometrial carcinoma. Proliferative endometrium was found in less than 40 years of age group cystic hyperplasia and endometria carcinoma was found in women aged more than 40 years.

Conclusion: All the patients having menorrhagia above 40 years should be screened for any endometrial pathology by endometrial curettage which can be done blindly (D&C,pipel) or hysteroscopically guided. Accurate analysis of endometrial sampling is the key to effective therapy and optimal outcome.

Keywords: Endometrial curettage, menorrhagia and premenopausal dysfunctional uterine bleeding.

INTRODUCTION

Menorrhagia refers to excessive or prolonged menstrual bleeding occurring at regular intervals. It is objectively defined as blood loss greater than 80ml[1] or menstrual period lasting longer than 7 days.

Dysfunctional uterine bleeding is responsible for 80% cases of menorrhagia[2]. Dysfunctional uterine bleeding is without demonstrable cause which can be ovulatory or an ovulatory. This menstrual disorder affects 2.5 million women in America every year[3]. The common causes of menorrhagia are sub mucous fibroid / fibroid polyp or adenomyosis, coagulopathy, systemic disorder like hypothyroidism, liver diseases, chronic endometritis and intra uterine Contraceptive devices.

Endometrial hyperplasia and endometrial carcinoma are other important causes of menorrhagia. Prolonged and unopposed estrogen stimulation is responsible for endometrial hyperplasia[4] .Endometrial biopsy should be performed in all women over 35 years with menorrhagia to rule out endometrial hyperplasia and endometrial carcinoma[5]. The best investigation for diagnosis of menstrual disorder is by endometrial sampling[6].

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MATERIAL AND METHOD

In this prospective descriptive study, a total of 35 patients of 35 to 50 years with menorrhagia were admitted through gynecology out patients departments of Social Security Hospital Multan Road Lahore and studied in a period of six months.

The data of each patient was recorded in an especially designed Performa which included assessment of detailed history regarding age, amount, duration and pattern of bleeding. Examination included general physical and systemic with special abdominal and pelvic examination. Ultrasonography with baseline investigation required for pre anesthetic evaluation. Under short general anesthesia endometrial curettage was done and endometrial samples were sent to histopathology department to find out the frequency of endometrial pathology in cases of menorrhagia. Patients were discharged after two days of stay in hospital and advice to follow up in gynecology OPD after two weeks with histopathology reports. Results were entered in Performa and analyzed.

Histological pattern of endometrial tissue in 35 cases of premenopausal women with menorrhagia.

Histological Pattern	n	%age
Proliferative phase	16	46
Secretory phase	12	34
Simple cystic hyperplasia	4	12
Adenocarcinoma	2	6
Adenomatous hyperplasia	1	2

Frequency of histological pattern in premenopausal age group (Age group in years)

Histological pattern	35-39	40-44	45-49	Total
Proliferative phase	9	3	4	16
Secretary phase	7	2	3	12
Simple cystic hyperplasia	0	1	3	4
Adenocarcinoma	0	1	1	2
Adenomatous hyperplasia	0	0	1	1

RESULTS

A total 35 premenopausal women with menorrhagia were included in the study patients with the fibroids, bleeding disorders and women with the post-menopausal bleeding were excluded. Out of 35 patients 16 were in the age group of 35 to 39 years and 12 patients in the age range of 45 to 49 years. Patients in the age range of 40 to 44 years were 7.

Histopathological reports of patients with menorrhagia showed proliferative endometrium in 16 patients'secretary phase endometrium in 12 patients' simple cystic hyperplasia in 4 patients' adenomatous hyperplasia in 1 patient and adenocarcinoma of endometrium in 2 patients.

Proliferative phase endometrium was found in less than 40 years of age group patients, cystic hyperplasia, adenomatous and adenocarcinoma were found in patients more than 40 years of age group.

DISCUSSION

Normally menstrual cycle is defined as having a mean interval of 28 7days[7] with mean duration of 4 to 7 days and amount of blood loss 30 to 70 ml. Menorrhagia (Hypermenorrhoea) is menses lasting longer than 8 days. It is a subjective complaint perceived by women as heaviness of her periods[8].

Despite the expensive research, the etiology of menorrhagia remains unclear. A disordered endometrial prostaglandin production has been implicated in the etiology of this condition. Abnormalities of endometrial vascular patterns and development also have a role.

Diagnosis of menorrhagia requires careful history along with the thorough local and systemic examination. Population studies have shown that 10 % of women have menstrual blood loss greater than 80 ml per cycle[6].

An ovulatory dysfunctional uterine bleeding is a disturbance of hypothalamic pituitary ovarian axis which results in irregular, prolonged and heavy menstrual cyclical bleeding. Unopposed estrogen stimulation leads to endometrial hyperplasia. Ovulatory dysfunctional uterine bleeding may include menorrhagia[8].

In more than half of the patients with menorrhagia no obvious cause was found and proliferative or secretory phase endometrium was found with no abnormality on local examination in my study. But endometrial hyperplasia was found in less than one third patients (12 to 14%). Naheel Mughal performed diagnostic curettage in case with the abnormal uterine bleeding out of 114 patients with the abnormal uterine bleeding, 51 patients were having endometrial hyperplasia[9]. Fayaz S has studied causes of gynecological hysterectomies and in her study incidence of endometrial hyperplasia was 4.68%[10]. Fauzia Adil conducted a two years study of D&C in abnormal uterine bleeding and found incidence of cystic hyperplasia in 32.8% and adenomatous hyperplasia in 8.8%[11]. Transvaginal ultrasonography is not very helpful in diagnosis of menorrhagia and D&C remains the gold standard for diagnosis. Hysteroscopic guided biopsies are best technique for viewing the uterine cavity [12]. In my study more than half of the patients were above 40 years of age out of which two thirds are above forty-five years of age, which is similar to the study by Mackenzie[13] and in study in Peshawar[14].

In my study histology revealed proliferative endometrium in 46% and secretory endometrium in 34%. While proliferative phase endometrium in 58.6% in menorrhagia women in study from Peshawar[14] and in a study by Fraser it was found in 15.93% of cases[15].

In a study by Histoshi 38.8% shows secretory endometrium in patients with menorrhagia[16]. Endometrial hyperplasia is common in perimenopausal women causing symptoms of irregular or prolonged bleeding due to an ovulatory cycle in majority of cases, although such bleeding in usually 80% is due to a benign cause[17].

Atypical hyperplastic patterns may also occurs after prolonged anovulation in the Stein Leventhal Syndrome which regresses after therapeutic ovulation induction. Most of these patients respond to progesterone. Endometrial hyperplasia is a precursor of endometrial carcinoma, the most common malignancy of female genital tract. It accounts for 6% of new cases and 3% of female cancer deaths[18].

In my study 2(6%) cases of endometrial carcinoma was found, which indicate a quite a high frequency of endometrial cancer. Mughal N (1997) showed a 0.44% endometrial adenocarcinoma[19]. In a study by Fraser (1995) on 117 menorrhagia women only 2 cases of adenocarcinoma of endometrium were found[15].

CONCLUSION

All patients having menorrhagia during reproductive life and above 40 years should be screened for any endometrial pathology by dilatation and curettage. Endometrial pathology can be diagnosed by endometrial sampling; this is required for effective therapy and optimal outcome. Menorrhagia is not a life threatening emergency, but it effects daily life and causes disruption and discomfort for many women. Understanding of the underline cause and mechanism of abnormal bleeding will allow appropriate treatment to be given it will decrease morbidity of the patient and improves the quality of life.

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How should endometrial hyperplasia confined to an endometrial polyp be managed?Â This separates endometrial hyperplasia into two groups based upon the presence of cytological atypia: i.e. (i) hyperplasia without atypia and (ii) atypical hyperplasia. D.Â The role of ultrasound in premenopausal women is restricted to identifying structural abnormalities, as there seems to be an overlap between normal endometrial thickness and that caused by endometrial disease.20 However, for women with PCOS and absent withdrawal bleeds or abnormal uterine bleeding, a TVS should be considered, as advised by RCOG guidance.21 A prospective study of 56 women with PCOS. Endometrial hyperplasia is a condition of excessive proliferation of the cells of the endometrium, or inner lining of the uterus. Most cases of endometrial hyperplasia result from high levels of estrogens, combined with insufficient levels of the progesterone-like hormones which ordinarily counteract estrogen's proliferative effects on this tissue. This may occur in a number of settings, including obesity, polycystic ovary syndrome, estrogen producing tumours (e.g. granulosa cell tumour) and certain Uterus: endometrium, endometrial polyps or adenomyosis. Any tissue involved by endometriosis. Ectopic endometrial glands / stroma are responsive to estrogen stimulation and can also develop an endometrial-like hyperplasia and subsequently carcinoma (Gynecol Oncol 2002;84:280, Gynecol Oncol 1996;60:238, Int J Gynecol Pathol 1996;15:1). Pathophysiology.Â Endometrial hyperplasia without atypia arising in endometrial polyp: polypectomy curative if completely excised under hysteroscopic guidance. Endometrial ablation can be used (not adequate alternate therapy for AH / EIN or refractory endometrial hyperplasia without atypia) (Am J Obstet Gynecol 1998;179:569).Â Sample pathology report. Endometrium, curettage