



A Study on Abnormal Uterine Bleeding in Perimenopausal Age in Rural Bihar

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Abstract

Objective: *The aim of present study is to know the incidence of various aetiopathological factors in cases of abnormal uterine bleeding in women with perimenopausal age. Clinical correlation of Abnormal Uterine bleeding with age, parity, marital status, socio economic status and different medical disorders and drug intake. Outcome and response to different types of treatment both medical or surgical.*

Methods: *The present study was carried out in the Department of Obstetrics and Gynaecology KMCH Katihar. The study material consisted of 200 women between the ages of 40-55 years presenting with abnormal uterine bleeding in Outpatient Department of Obstetrics and Gynecology as well as those admitted in the wards. Detailed clinical history, physical examination, investigations were carried out and treatment was done according to the cause of abnormal uterine bleeding, socioeconomic status, severity of the disease and wish of the patient*

Results: *Incidence of abnormal uterine bleeding in perimenopausal women in KMCH, during the study period was 14.35%. Maximum no. of cases 69% were in the age group of 40-45 years. It is evident from our study that abnormal uterine bleeding is much more common in multiparous women than in nulliparous women. Out of 200 cases 75% were multiparae with parity 1-4, 20% cases were grand multiparae and only 5% were nulliparae. 76% cases were muslims 68% belong to middle and 21% lower socioeconomic class. In present study, no organic cause could be found in 55%, of cases and were labeled as Dysfunctional uterine bleeding after proper investigations. Organic causes were found in 45% of the cases. Among organic causes 27% of the cases were due to fibromyoma of uterus. Adenomyosis and PID found in 3% and 3% cases respectively. Rest of the class distributed only 1-2% of cases.*

Conclusion: *Abnormal uterine bleeding is more commonly seen in 4th decade of life. Any deviation from normal pattern must be investigated as organic causes form important aetiological factor in this age group. Hysterectomy was the treatment of choice in majority of patients.*

Keywords: *Abnormal uterine bleeding, perimenopausal age, fibroid, hysterectomy.*

Introduction

Abnormal uterine bleeding is one of the most common gynecological disorders in the perimenopausal age group as this is the age, when women are in stress both socially and mentally. Secondly most of the organic disease has seedlings up in this age group. Continuous bleeding and other menstrual abnormalities should not be considered physiological. They must be investigated and treated despite the common belief that they are "sign of change". A precise definition of perimenopausal is difficult but it is generally agreed to be the interval around the end of reproductive period that is associated with menstrual and endocrinal alteration i.e. the age between 40-55 yrs. There is no characteristic bleeding pattern which is specific for abnormal uterine bleeding. When the causes are demonstrable and irreversible they are grouped as organic but when the causes are not obvious they are labeled as dysfunctional uterine bleeding. Abnormal uterine bleeding includes both organic and dysfunctional uterine bleeding.

Materials and Methods

The present study was carried out in the Department of Obstetrics and Gynaecology KMCH Katihar. The study material consisted of 200 women between the ages of 40-55 years presenting with abnormal uterine bleeding in Outpatient Department of Obstetrics and Gynecology as well as those admitted in the wards. Observations were done under the following headings -HISTORY- Name and address, age, religion, community(hindu, muslim, christian), occupation, socioeconomic status, presenting complaints with duration, history of presenting complaints, mode of onset, association of pain, bleeding pattern (menorrhagia-metrorrhagia, polymenorrhoea, postmenopausal bleeding, prolonged continuous bleeding, with preceding amenorrhoea, without preceding amenorrhoea, severity). Menstrual history: LMP, last bleeding, previous menstrual bleeding-whether it was regular or irregular, flow was

average/scanty/ heavy, Intermenstrual bleeding, Associated with dysmenorrhoea. If of menopausal age duration of menopause was also recorded. Obstetric History: No. of pregnancies, Mode of delivery, Age of last child, Past History: H/o diabetes, hypertension, tuberculosis or any endocrine disease or any type of operation done. Family history of diabetes, hypertension, tuberculosis, endometrial carcinoma etc. Personal History: Veg/Non veg/Addicted to alcohol / tobacco. Drug History: H/o taking any hormonal therapy and others. Clinical Examination: General examination of the patients: General build Thin, Average, Obese, pulse, blood pressure, pallor, jaundice, oedema, temperature, neck glands, lymphadenopathy breast, Thyroid Gland. Systemic Examination: Chest -Normal vesicular sound or any adventitious sound CVS Normal or any murmur. Per Abdomen - Any abnormal finding, present or not. If a lump was found, it was examined under following headings:- Inspection - Contour of abdomen, skin over lump whether umbilicus is everted or inverted. Palpation - Site, size, surface and margin, extent, consistency, tenderness, mobility of lump. At the same time liver and spleen were palpated separately. Percussion-percussion note of the lump was noted. Pelvic Examination - Inspection of external genitalia. Speculum examination - to see the condition of cervix and vagina and whether any discharge present or not. Bimanual Examination - position of uterus and to find out if there, is some palpable pathology in uterus, tubes, ovaries and broad ligament, to assess the size and mobility of the lump. Per Rectal Examination - to know the condition of parametrium and rectal mucosa in few selected and relevant cases. Investigations: Routine laboratory investigation, Blood-haemoglobin estimation, Total and Differential count of WBC count Bleeding time and clotting time, platelet count, peripheral smear, ABO & RH typing, HIV, HBsAg, ESR, Blood sugar-fasting and postprandial, Blood urea Routine urine examination Pelvic ultrasonography to see Uterine

contour, Endometrial thickness, Any endometrial pathology, any adnexal pathology – ovary / tube, Differentiating benign polyp from malignant lesion. Examination under anaesthesia and curettage (diagnostic and therapeutic) was done: To exclude organic pathology, To obtain endometrium for histological examination, To arrest bleeding in some cases, Removal of polyp, or RPOC or IUCD and also vesicular mole, To resect a submucosal fibroid. Endometrial ablation and transvaginal ultrasonography was done in few selected cases. Timing of curettage- in patients with completely regular cycle curettage was done in premenstrual phase and in patients with completely irregular cycle, accurate planning of the time was impossible and was done at the onset of menstruation i.e. first day of periods. In patients with continuous bleeding curettage was done any day during the bleeding phase. Collected material scraped from the uterus was fixed in 40% formalin and sent for histopathological examination. Material for microbiological examination was preserved in normal saline and sent to the department of pathology KMCH. Apart from materials obtained by Dilatation and curettage, the specimen removed after hysterectomy was also sent for histopathological examination. Size of uterus was measured after hysterectomy. Special Investigations were done in few selected cases. Thyroid Function Test: Pap smear, Cervical biopsy -Multiple quadrant biopsy by punch biopsy forceps: Wedge biopsy. Cervical tissue was placed in 10% formalin and sent for histopathological examination. Chest X-ray: Management: Diagnosis of causes of abnormal uterine bleeding were done on basis of history, clinical finding, Ultrasonographic finding as well as findings of histopathological examination. Management was done according to the cause of abnormal uterine bleeding, age, socioeconomic status, severity of disease and wish of the patient. Two types of treatment were given : Conservative, Definitive. Conservative treatment was given: in young patients, Condition of non alarming, Menstrual pattern not clear. Conservative management was

done by giving: Reassurance, General measures like nutrition, iron therapy, Blood transfusion, Maintenance of menstrual diary. Definitive treatment was done: In elderly patients, Condition alarming, Menstrual pattern clear, Malignancies. The definitive treatment included: Medical, Surgical, Radiation. Medical treatment was given in young patients having no organic cause e.g. infection like PID. Treatment given: Hormonal, Non hormonal treatment included NSAID, Antibiotics. Antikoch's treatment was given in some cases. Antithyroid treatment was given in few cases. Surgical treatment was done in patients having organic pathology etc-it included. Polypectomy, Wertheims hysterectomy, Ward mayo's operation in cases associated with second degree uterovaginal prolapsed. Follow Up: Majority of patients were followed up for one year.

Results

A series of 200 cases perimenopausal women admitted with Abnormal uterine bleeding during the period of July 2006 to Nov 2008 were studied. The incidence of abnormal uterine bleeding in perimenopausal women was 14.35%. The analysis of the cases, according to age, bleeding pattern, duration of complaints, clinical findings showed that maximum no. of patients 69% were between 40-45 years of age. Abnormal uterine bleeding was much more common (95%) in parous women. It was only (5%) in nulliparae and rest were multiparae. Among the multiparae it was more common in parity 1-4 (75%). Majority of the patients of abnormal uterine bleeding (76%) were Muslim. Most of the cases were from medium socioeconomic status (68%). Abnormal uterine bleeding was much more common in married (97%) than unmarried women. Majority of group (55%) had not any obvious organic cause. After investigations they were labeled as dysfunctional uterine bleeding. Remaining 45% of cases had some organic cause.

Table 1: Aetiology of various organic causes

Aetiology	No. of Cases	Percentage
Fibroid	54	27%
Adenomyosis	6	3%
Endometrial Polyp	2	1%
Endometrial CA	4	2%
Endometriosis	4	2%
TB Endometritis	2	1%
Cervical Polyp	2	1%
Ovarian tumour	2	1%
H. Mole	2	1%
CA Cervix	4	2%
PID	6	3%
Hypothyroidism	2	1%
Total	90	45%

Majority of patients (80%) reported within 1 year of bleeding. Menorrhagia (27%) and metrorrhagia (27%) were more common in cases between 40-45 years of age group. Polymenorrhoea was also common in cases between 40-45 years of age group. Other bleeding pattern were also seen but in less frequency out of 7% cases of postmenopausal bleeding 6 cases were between 46-50 years of age group. Only 2 case of menorrhagia was seen in 51-55 years age group. All type of bleeding patterns were seen in cases between 46-50 years age group but in less frequency except menorrhagia which was seen in 12% of cases. Commonest bleeding pattern menorrhagia and metrorrhagia were more common in parous women. In multiparous women, menorrhagia was more common. Postmenopausal bleeding was more common in parous women. Polymenorrhagia and metrorrhagia were not found in nulliparous women. Other bleeding pattern like polymenorrhagia and continuous bleeding were less in frequency. Maximum number(56%) of patients in this series were anaemic with Hb 8-10gm%. severe to moderate degree anaemia with Hb% < 8 gm% were present in only 12% of cases. Severe anaemia with Hb% , 6 gm% were present in only 4% cases. 32% of cases were having accepted limit of haemoglobin.

Table 2: Bleeding pattern in abnormal uterine bleeding cases

Bleeding Pattern	No. of Cases	Percentage
Menorrhagia	80	40%
Polymenorrhoea	28	14%
Polymenorrhagia	10	5%
Metrorrhagia	58	29%
Postmenopausal bleeding	14	7%
Prol. bleeding with prece. Amen.	6	3%
Cont. bleeding without prece. Amen.	4	2%
Total	200	100%

Table 3: Clinical finding in relation to bleeding pattern

Type of bleeding	Uterus			Ovaries	
	Total	Normal uterus	Bulky uterus	Normal ovaries	Cystic ovaries
Menorrhagia	80	32	48	62	18
Polymenorrhoea	28	24	4	20	8
Polymenorrhagi-a	10	4	6	4	6
Metrorrhagia	58	44	14	50	8
Postmenopausal bleeding	14	8	6	14	0
Continuous bleeding	10	6	4	6	4
Total	200	118	82	156	44

45 cases were found to have one or other organic cause of bleeding. Among them maximum were having fibromyoma uterus 27%. Adenomyosis and PID were found in 3% cases each. Other organic causes were also seen but in less frequency. There was not any obvious organic pathology in 55% of cases. After proper investigations they were stamped as dysfunctional uterine bleeding. The commonest type of bleeding pattern was menorrhagia 40% followed by metrorrhagia 29% and polymenorrhoea 14% case. Postmenopausal bleeding in 7%. Polymenorrhagia and continuous bleeding were seen in 5% of cases each. Regarding duration of symptoms majority 80% of the patient came to out-patient department with in 1 year of suffering. It was found that

majority of patients were mildly anaemic 56%, with normal Hb% 32% case. Only 4% were severely anaemic with Hb% level < 6 gm%. Bulky uterus was found in 41% cases whereas normal size uterus was found in 59% cases. Cystic ovaries were found in 22% cases. Regarding endometrial histology, in most of the case proliferative 41% and secretory endometrium 26% were found. Hyperplastic endometrium was found in 21% cases. Irregular shedding was found in 3%, atrophic endometrium in 3% and endometrial carcinoma was found in 2% cases. Bleeding pattern had no significant relation with age. There is no definite relationship between endometrial pattern & bleeding pattern, however atrophic endometrium was mostly found in patients with postmenopausal bleeding. Maximum no of patients 84% were treated surgically. Medical treatment was given in 13% cases. Conservative treatment was given in only 1% cases. Fibroid was much more common in women between 40-45 years age group (50 cases) and in multiparous women having parity between 1-4 years (40 cases). Fibroid was reported within 1 year of suffering. Most common bleeding pattern in fibroid was Metrorrhagia (26 cases). The dysfunctional uterine bleeding was much more common in women between 40-45 years age group (70 cases) and Menorrhagia was relatively more common (52 cases). 4 cases of ca cervix were found, out of which 2 cases belong to 40-45 years and the other 2 cases belong to 46-50 years.

Table 4: Distribution of cases according to endometrial pattern

Endometrial Pattern	No. of Cases	Percentage
Proliferative	82	41%
Secretory	52	26%
Hyperplastic	42	21%
Irregular shedding	6	3%
Atrophic	6	3%
Endometrial Polyp	2	1%
Endometrial carcinoma	4	2%
Tuberculous endometritis	2	1%
Total	196	98%

Majority of cases of abnormal uterine bleeding with proliferative endometrium had normal uterus. Maximum no. of bulky uterus had hyperplastic endometrium. Majority of cystic ovaries were associated with hyperplastic endometrium. Most of the abnormal uterine bleeding cases were treated surgically (84%) cases. Medical treatment was given in (13% cases) of abnormal uterine bleeding. 4 cases were treated conservatively and 2 cases of advanced ca cervix were referred for radiotherapy.

Table 5: Percentage of different types of surgical procedures done in cases of dysfunctional uterine bleeding.

Types of surgical procedures	No. of Cases	Percentage
Polypectomy and Diagnostic Curettage	2	1%
Dilatation and curettage	2	1%
Abdominal hysterectomy	40	20%
Abdominal hysterectomy+Unilateral salpingoophorectomy	52	26%
Abdominal hysterectomy+Bilateral salpingoophorectomy	66	33%
Ward Mayo's Operation	2	1%
Extended hysterectomy	2	1%
Wertheims hysterectomy	2	%
Total	168	84%

Discussion

A normal menstruation has always been accepted as an indication of good reproductive health. A change in amount, duration or regularity of this periodic loss is therefore regarded as something going wrong and not accepted by any women especially in the perimenopausal age. As the age advances, menstruation should become less frequent and scanty. In all perimenopausal women with abnormal uterine bleeding, the steps to go through are to diagnose the cause of bleeding and then treat according to the cause and evaluate the presence of endometrial hyperplasia and carcinoma rather doing general mistake to treat with any medical therapy to slow or stop the bleeding until the carcinoma of the endometrium has been eliminated as a possible cause. Abnormal uterine bleeding still a challenging problem to every gynaecologist, may be encountered in any

women's life in reproductive age group. In the present study 200 women of perimenopausal age with Abnormal uterine bleeding were studied. Incidence of abnormal uterine bleeding in perimenopausal women in KMCH, during the study period was 14.35%. Maximum no. of cases 69% were in the age group of 40-45 years. 26% of the cases in the age group of 46-50 years. Least number 5% cases were in the age group of 51-55 years. Other workers like Sutherland 1949; Novak 1962 and Joffecoate 1987 also observed that Abnormal uterine bleeding was more common at the end of reproductive life i.e. 4th decade our observations are comparable to the observations of Sharma and Laghate 1991, Chakravarti et al., 1992, Shekhar Purandre et al. 1993 and Daver et al. 1993 who observed maximum incidence of Abnormal uterine bleeding after 4th decade as in present series. End of reproductive life is phase of waxing and waning of ovarian function and is also a period of stress for women both domestic and social. So this clearly explains the abnormalities of menstruation in this age. Moreover, organic causes such as malignancies of genital tract are also common in late period of reproductive life. It is evident from our study that Abnormal uterine bleeding is much more common in multiparous women than in nulliparous women. Out of 200 cases 75% cases were multiparae with parity 1-4, 20% cases were grand multiparae and only 5% were nulliparae. Our observations are more or less comparable to the observation of Banerjee et al., 1981, Rybo et al., 1985, Maheshwari et al., 1992 and Pant et al., 1993. In the series of Banerjee et al., 1981, 62.5% and Pant et al., 1993, 75% were multiparae with parity (1-4). However in series of Bhattacharjee 1964. Only 34.6% of the cases belonged to the para 1-3. This variation could be due to difference in the region surveyed. In our region multipara constitute the major portion of female population. It is evident that most of the cases 76% were Muslims, 24% were Hindus. The distribution of religion matches with ratio of different religions in local population. Regarding relation to Abnormal uterine bleeding with socio

economic status, it has been shown that 68% of the cases were middle class family and 21% from lower socio economic class. Only 11% of the cases were from higher socio economic class. This appeared to be due to the fact that majority patients attending GOPD were from middle class families. Affluent classes usually go to private clinics. In our study the incidence of abnormal uterine bleeding was more common in married women 97% than in unmarried women 3%, this is because marriage is an essential part of life in our society. 80 majority of the female population are married. In present study, no organic cause could be found in 55% of cases and were labeled as Dysfunctional uterine bleeding after proper investigations. Organic causes were found in 45% of the cases. Among organic causes 27% of the cases were due to fibromyoma of uterus. Adenomyosis and PID found in 3% and 3% cases respectively. Rest of the class distributed only 1-2% of case. Purandare et al. (1993) – in a series of 518 patients observed that organic pathology in 37% of cases and 63% patients were having without any organic pathology. Their study was mainly on the cases of dysfunctional uterine bleeding but our study is based on all cases of abnormal uterine bleeding, so our incidence of organic causes is more. In this study also fibromyoma constituted the majority of the cases and was seen 29% of case of abnormal uterine bleeding due to organic pathology. Other organic causes were seen in small %age as seen in our study. Jeffcoate (1999) and Novak et al. also found that majority of perimenopausal cases with Abnormal uterine bleeding has no organic pathology. This is probably due to alteration in hypothalamic – pituitary – ovarian function preceding menopause. As observed by P.K. Devi 1987, menstrual regularity drops from 90% to 10% due to hormonal changes. Tuberculous Endometritis – Although TB endometritis is still prevalent in our country. It is found only in 1% of cases both were infertile. Although abnormal uterine bleeding is not the common mode of presentation of disease as also found by

Solapurkar 1966 is 1.2% and Tyagi et al., 1997 1.08% of the cases. Endometrial polyp – there were only 2 cases of endometrial polyp in our study, Roy Choudhary et al., 1981; Jovicevic, 1989 and Maheshwari et al., 1977 reported 1%, 2.6%, and 2.9% of the cases of endometrial polyp more or less similar to our study. It was observed that the commonest bleeding pattern in our services was menorrhagia (40%) other type of bleeding pattern were less often seen. Our observation correlates well to the observation of Bhattacharjee (1964), Sharma et al. (1991) and Bidya et al. (1993). They observed that maximum no. of Abnormal uterine bleeding cases were of menorrhagia. In B. Bhattacharjee series 1964, menorrhagia was in 38.02% of the cases. Itononi et al 1988 have shown that the commonest bleeding pattern in perimenopausal age is metrorrhagia. Most of the women seek medical advice when the menstrual flow is excess. For less and infrequent menstruation they do not bother. So menorrhagia constitutes the major part of Abnormal uterine bleeding. It was observed that maximum no. of women 80% had been suffering for 1 year, 12% for 2 years and 8% for > 2 years. Marwah et al. (1993) showed that 15.90% suffered for 1 year, 34.09% for 2 years and 29.54% for 3 years, 20.47% cases for > 3 years. This disparity may be due to ignorance and poor literacy rate in our population. It was observed that menorrhagia and metrorrhagia was common in 27% women in the age group 40-45 yrs. polymenorrhoea (10%) was also common in cases between 40-45 years of age group, out of 7% cases of postmenopausal bleeding 3 (3%) cases were between 46-50 years age group and 4 (4%) cases were between 51-55 years age group. All types of bleeding pattern was seen in cases between 46-50 years of age group but in less frequency except menorrhagia which was seen in 12% of the cases. S. Sharma and M. Iaglate (1991) found that maximum no. of patients of abnormal uterine bleeding pattern belong to 40-45 years of age group. Fredric, J. Jelovsek (2000). Abnormal uterine bleeding can infrequently occur

at any age, however they are more common after the age of 40 years, especially after 2-4 years before menopause. In the series it was found that menorrhagia and metrorrhagia were more in parous women. In nulliparous women menorrhagia was more common. Postmenopausal bleeding was more in parous women. Polymenorrhagia and metrorrhagia was not found in nulliparous women. Other bleeding pattern like polymenorrhagia, polymenorrhoea and continuous bleeding were less in frequency. Maheshwari et al. (1992) reported that largest group comprised of multiparous women having parity 1 to 4. Pant et al. (1993) reported that 75% of perimenopausal women with abnormal uterine bleeding were multipara having parity 3 or more. On the other hand. In Deshpandey's series – the incidence of abnormal uterine bleeding in multiparous was 21.2% emphasized that patients with infrequent and prolonged bouts of bleeding had poor obstetrical outcome. In our study 32% patients were with acceptable haemoglobin level around or more than 10 gm%. Majority (56%) of patients were mildly anaemic with haemoglobin level 8-10 gm%. Severe anaemia was found in 4% of the cases. In Bidya (1993) and Gahlot et al. (1993) showed 34% and 88.64% of cases were mildly anaemic. The assessment of amount of blood loss by different women is very subjective. Some women complain of excessive blood loss when they have normal blood loss. On the other hand some women each have huge amount of blood loss during the menstruation (up to 80 ml) without any reduction in their Hb%. Hb level depends on the iron reserve of body as well. Jacob and Butter 1965 – said that majority of the patients in this series who developed iron deficiency anaemia, a compensatory mechanism is initiated. Which tended to reduce the degree of anaemia. In our study bulky uterus was present in 41% cases. Cystic ovaries were present in 22% cases. Most of the cases with menorrhagia 60% had bulky uterus. Cystic ovaries were more commonly associated with menorrhagia and polymenorrhoea. Bulky uterus was found in cases with organic causes. In

the series of 210 patients, Chhabra et al., 1992 – showed uterus enlargement is 66.19% of the cases of Abnormal uterine bleeding. These variations could be due to number and group of cases studied. S. Samrat et al., (1991) – in a study of dysfunctional uterine bleeding cases where bilateral salpingoophorectomy was done showed that more than 56% of the cases had positive ovarian pathology. Mitra (1964) – reported that the ovaries are stimulated by the pituitary gonadotrophin even after menopause leading to ovarian stromal hyperplasia. In our study fibroid and dysfunctional uterine bleeding was much more common in multiparous women having parity between (1-4). And in women between 40-45 years of age group (25 cases). Metrorrhagia was relatively more common. Most of the cases reported within a year of suffering. Only 2 cases reported after 2 years. Shekhar Purandre et al. (1993) made a retrospective study of 518 hysterectomies carried out for the clinical diagnosis of abnormal uterine bleeding without any obvious uterine pathology. A histopathological analysis of the hysterectomy specimens revealed 37% to have organic pathology. These ranged from fibroid (29%) and adenomyosis (52.5%). The largest group was of dysfunctional uterine bleeding in 63% of the cases. In our study we observed that 4 cases of ca cx presented with perimenopausal bleeding. All were multiparae coming from low socio economic status and were Hindu. It has been observed by other authors also that low socio economic status and multiparity are firm important risk factors. Dutta and Novak, Wakefield et al., 1973; Beral, 1974; Roy Choudahry, 1975 – however, observations of carcinoma cervix requires a separate study. Our observation here signifies the importance of investigating a perimenopausal women with Abnormal uterine bleeding. In our study are encountered 4 cases of ca endometrium as compared to varied incidence noted by various author's like Solapurkar 1986, 0.6%; Sarin et al. 1985 8.4%; and Leader 1986, 0.9% of cases. The variation depends on the group of study. In the

cases of ca endometrium 1 case was obese and other case was hypertensive. This indicates the importance of investigating the perimenopausal women especially who are obese, hypertensive and diabetic, as they run the risk of endometrial carcinoma. It has been said that ca body of uterus has been found to have a definite relationship with advanced age, obesity, late menopause diabetes and hypertension etc (Gurberg Hall, 1961). In this series only 1% of hypothyroidism was found with complaints of menorrhagia. Thyroid function test of the patient given in table XIX. Scott and Missey 1964 observe excessive menstrual bleeding in 46% and 70% of hypothyroid patients respectively. Histopathological examination of endometrium obtained from diagnostic curettage as well as from hysterectomy specimens revealed proliferative endometrium is 41% and secretory in 26% which is in close conformity with Das and Chugh 1964, who found proproliferative endometrium is 41.5% and secretory endometrium is 26% of the cases. Hyperplastic endometrium was seen in 21% of the cases similar to finding of Sarin et al., 1985; Vig 20.1%. However, in Sutherland series 1949, 60% of the patients had normal endometrium though up to 30% have endometrial hyperplasia, 3% with irregular ripening, 1.5% with irregular shedding and 1.2% with atrophic changes. Kistner 1964, Pat et al., 1968, Maheshwari et al., 1991 and Purandre et al., 1993 – also found proliferative endometrium in maximum number of cases 57.55, 63.0% and 66.3% of the cases respectively. Proliferative endometrium was present in all age groups of perimenopausal women had with all parities. This type of endometrium was more common with menorrhagia, metrorrhagia and polymenorrhoea. Irregular shedding of endometrium was seen in 3% of the cases in the present series. Atrophic endometrium was found in 3 cases 3% associated with postmenopausal bleeding. In series of Das and Chugh 1964, 1.8% Mehrotra 1972, 2.6%, Narula 1978, 5.8% and Sutherland 1993, 1.1% of atrophic endometrium were found. Endometrial carcinoma was found in 2 cases, 2% compared to

the varied incidence noted by various authors like Solaperkar 1986, reported 0.6%; Sarin et al. 1985, 8.4%; and Ledor 1980 in 0.9% cases. Tuberculous endometritis, is a common and important disease entity in our country was found in only 1% of the cases as also found by Solaparkar 1986 is 1.2%, Tyagi et al., 1877 is 1.8%. In our series majority of cases 84% of Abnormal uterine bleeding were treated surgically. 13% patients were treated with drug depending on the causes of abnormal uterine bleeding 2% of patients were managed on expectant line with only reassurance. Symptomatic relief and haematinics. 2 cases of carcinoma cervix was in advanced stage and was referred for radiotherapy. Patients underwent curettage and their symptoms were relieved. Nilsson, Rybo 1971 and Novak 2002 reported that menstrual blood loss is reduced in the first but not in subsequent periods following curettage. The only major therapeutic benefit is in severe haemorrhage where bleeding reduces and stops possibly by removing hyperplastic and unshed endometrium. According to the Sutherland 1949 it is curative in 12% cases of Abnormal uterine bleeding. Hysterectomy was done in 82 cases 1% of ca endometrium : 1 case, 1% of dysfunctional uterine bleeding was treated by ward Mayo's operation because they also had mild degree of prolapse. According to Jeffcoate when patients are above 40 years and when haemorrhage fails to respond to simple measures, hysterectomy is indicated. It is treatment of choice in all cases of persistent or recurrent postmenopausal bleeding for which there has been no obvious causes (Jeffcoate, 2002). Other workers also preferred surgery in perimenopausal age group with Abnormal uterine bleeding In an analysis of hysterectomy in women above 40 years age group in the Government Rajaji Hospital, Madurac (1985), 22% of hysterectomies for non malignant causes were for Abnormal uterine bleeding. In developing countries like ours, where most of the women do not return for follow up and are not dependent for hormonal therapy, hysterectomy will be the best choice (Ratnam 2001). In the

institute of Obs and Gynae, Chennai 1990, 26% hysterectomy for non malignant indicators were for Abnormal uterine bleeding in women of 40 years or more, hysterectomy should be considered in all cases of persistent or recurrent bleeding and of failed or incomplete response to medical therapy, unless the patient is immediately premenopausal, removal of uterus is usually psychologically much more acceptable provided the patient has been fully consulted and counseled. Regarding hysterectomy, conflicting view have been compressed by different authors. Some gynaecologists suggest that once a woman's family is complete, the uterus should be considered as a foreign body which should be removed. (Jeffcoate). On the contrary some have said that even for the women who do not wish to have more children or have completed her family, uterus is not an organ to be discarded. Hysterectomy should be reserved for women in whom further conservative or medical treatment is not likely to be efficacious. Irregular shedding was found in 3.%, atrophic endometrium in 3.% and endometrial carcinoma was found in 2.% cases. Bleeding pattern had no significant relation with age & parity. There is no definite relationship between endometrial pattern & bleeding pattern, however atrophic endometrium was mostly found in patients with postmenopausal bleeding. Maximum no of patients 84% were treated surgically. Medical treatment was given in 13% cases. Conservative treatment was given in only 1% cases.

Conclusion

Abnormal uterine bleeding is an important and common gynaecological problem at perimenopausal age. It is more commonly seen in 4th decade of life. Any deviation from normal pattern of menstruation in perimenopausal age must be investigated as organic causes from important aetiological factor in this age group. Such symptoms should never be dismissed by the women and her medical attendant. Abnormal uterine bleeding may be due to malignancy of the

genital tract. Early diagnosis of these conditions depend on the early reports and investigations of such cases. Surgical treatment is still an important method of treatment in our region. Although perimenopause is largely contributed to unstudied, many therapeutic approaches to the management of perimenopausal disturbances exists both prescription and non-prescription. The perimenopausal health and quality of life can be maintained and improved through preventive care, life style modification, early diagnosis of disease or increased risk for disease and interventions when appropriate. Our clinical goal should be to optimize the women health during and after this transition period.

References

1. Angelli G, Grescle P, De Curto M, Galli V. Br. J. Obst. Gyane 1982 : 89, 681-682.
2. Andersch B, Milson Rybog Acta Obst Gynae Scand 1988, 67 : 645-648.
3. Anderson K, Oblind V, Rybo G, 1994, 49 : 56-72.
4. Anderson J.K, Rybo G. Br. J. Obst, Gynae 1990; 97 : 690-694.
5. A.Costa A.A, Buttram V.C et al. Obst & Gynacol. 42, 1973.
6. Abeshouse C Benjamin, ABESHOUSE JR. 34-43, 1966.
7. Anderson R.M & Dougherity C.M Amer J. Obst & Gynae 89, 23.
8. Anspach and Hoffman Am. J. Obst & Gynae, 29 : 473.
9. Arena & Foix Revista Obst & Gynae 9 : 209. quoted by Bhattachariuu S.K. 1964.
10. Aparcio, S.R. Bird, C.C. et al. Br. J. obst. Gynae 86 : 3.4, 1979.
11. Bartermex & Markee Quoted b. Navak E.R. 1974.
12. Bidaye S. J. obst Gynae. India 42 : 422, 1993.
13. Ballinger C.B Br. Med. J. 1975, iii : 344-346.
14. Blum M, Blum G. 1992; 8 : 313-317.
15. Berg Quist A & Aybo G 1983 Br. J. Obst & Gynaecol, 90, 255-258.
16. Bridgeman SA 1994 Lancet, 344 (8926) : 893.
17. Beazly J.M. Br. J. Hosp. Med. 1972 : 7 : 572.
18. Barker, M.G. Br : Med. Journal ii, 91 : 1968.
19. Benson R.C. & Miller J.N. Obst. Gynae 8, 523-30, 1956.
20. Bhargava H. Agarwal, V.J. Obst. Gynae. 31 : 989; 1981.
21. Charlotte J, Richards K & Kase NG 1987 Obst. & Gynaecolen N. AM 14(1) : 169.
22. Caulter A, Peto V, Doli H. Fam Prac. 1994; 67-74.
23. Caulter A, Bradlow J. Agass M, Martin Bates C, Fulloch A. Br. J. Obst. Gynaec. 1991; 98 789-796.
24. Caulter A, Me Pherson K, Vissey M. Soc Sci Med 1988 : 27 : 987-994.
25. Cameron I.T, Haining R, Lumsden MA, Thoman UR, Smith S.K. 1990; 76; 85-88.
26. Christians GCML, Sixema JJ, Br. J. Obst. Gynaec 1980, 87 : 425-439.
27. Chimbera JH, Anderson ABM, Furnbull AC Br J. Obst. Gynaec 1980; 87 603-609.
28. Carlosn KJ, Miller BA, Flower FJ. Obst. Gynaecol. 1994; 83 : 566-572.
29. Chamberlain G. Freeman R. Pricef A, Green D. Evel Br. J. Obst. Gynaec 1991, 98, 707-711.
30. Chimbera TH, Andrson AB, Naish C, Cope F Furball AL. Br. J. Obst. Gynaec. 1980; 87 : 1152-1158.
31. Claessens E.A. & coucll C.A Am. J. Obst. Gynaec 139, 277 : 1981.
32. Daumes. *Textbook of Gynaec & Contraception* 11th Ed. P 177-84.
33. Davies AJ, Anderson ABM, Turnbull A.C. Obst. Gynae 1981; 57 : 74-78.
34. Davey D.A. *Dysfunctional Uterine bleeding* : Whitfield CR, ed. Dewhurst 5th Ed 1995 P. 599.

35. Das & Chugh S. 1964, J. obst & Gynaecol India 14, 348-354.
36. Dutta D.C. *The test Book of Gynaecology* 3rd Edn 2001, 51-52.
37. Dewhursts C.J. *textbook of Obst & Gynae* 5th Edn 590-607, 608-614.
38. Dockeray CJ, Sheppard BL, Bonnar J. Br. J. Obst. Gynaec 1989; 96 : 840-844.
39. Edlund M, Magnusson C. Von Schoulz B. London Royal Society of Med Press 1994; P. 36-37.
40. Emanueal H.H. Verdel M.J, Warmstcker K. Am. J. Obst. Gyne 1995; 172 : 547-552.
41. Edlund M, Anderson K, Rybo A, Lindoss C, Astedt B, Br. J. Obst. Gynace. 1995, 102; 913-917.
42. ERIAN J 1994 Br J. Obst & Gynaecol 101, 19-22
43. Friedman AJ, Hoffman DL. Comite F, Brauneller RW, Miller JO, Obst Gyne 1991; 77 : 720-725.
44. Fogelman I, Fentiman I, Hamed H. Shidd J. WW Br. J. Obst. Gynae 1994; 101 : 19-23.
45. Friedman AJ, Harrison Aflas D. Barbitri RL, Fertilisteril 1989 : 51 : 251.
46. Fraser IS, Res clin forums 1983 : 93-99.
47. Fraser JS Pearri C, Sherman R.P Elliolet PM obs Gynae 1981; 58 : 543-551.
48. Fraser IS Bailliere Tudal 1989 : PP 391-402.
49. Fraser JS, Me Carron G, Harkham R. Resta T. watt A Obst. Gynae 1986; 68; 630-633.
50. Greer JA, Lower GD, Walker JJ Br. J. Obst. Gynae 1991 ; 98 : 909-918.
51. Gath D as born M. Bungay G et al. Br Md. J. 1987 ; 294- ; 213-218.
52. Greenberg M.J. Psychosom Res 1983 ; 27 : 209-214.
53. Grimes DA *Diagnostic dilatation curettage : a reappraisal* Am J Obst Gynaec 1982 ; 142 : 1-6.
54. Gruillebad J. Anderson A.B.M & Turbull A.C.Br.J.obst.gynel 85:53, 1978.
55. Ghosh BK and Sengupta K.P. 1968 J Obst & Gynaec Indian 18 : P. 310.
56. Haynes P.Hodgson H ,Anderson A.B.M & turnbull A.C. Br. J. Obst. Gynae 84:763; 1977.
57. Hallinberg L, Hogdahl A, Nilsson L, Rybo G 1966: 45;320-351.
58. Higham J.M.Shaw RW, Br.J.Obst. Gynae 1992;695-696.
59. Haynes OJ Flint AP. Hodgson H et al Int Obst.Gynae 1980;17: 567-572.
60. Igham J.M.O.Brien PMS,Shaw RW.Br.J.Obst.Gynae 1990: 97: 734-739.
61. Hall P, Maclachalan N, Thorn N, Nudd MW, Taylor CG. Br. J.Obst.Gynae 1987; 94:554-558.
62. Higham JM Shaw RW Am J. Obst. Gynae 1993; 169 : 1134-1139.
63. JHenzel MR, Corson SL, Moghissi K et al Eng.J.Med.1988,318:483-489.
64. Hoffman J.W.Am.J.Obst.40:671:1940 quoted by Dewhurst.
65. Iles S, Gath D, Baillicre Clinical Obst. Gynaec London, 1989, p 375-389
66. Israel S.L. & Mazer Am.J. Obst.Gynae 36: 445;1938
67. Jacobs A & Butler E.B.Lancit II,407;1965
68. *Jeffcoate's T.N.A.-Principles of Gynaecology* 4e, p 518, 1975, 5e. p 513; 1987
69. *Jeffcoate Principle of Gynaecology*, 5th edition, 1987 : 513-531,706.
70. Jones W. Howard-Novak's *Text book of Gynaecology*, 10 e. p 777; 1981.
71. Joshi S.K. & Deshpande, D.H. - Obst .Gynaec, 14 India: 361;1964
72. Jaffe G. Wickham A. Jintern Med. Res., 1973; 1:127-129.
73. Kimura, T, Yoshida Y. Toda N. Am J .Obst Gynaec 1992,167(5):1409-1416.
74. Kanakadurgamba K and Srinivasa Rao K.1964, J. Obst. Gynaec Indian 14 p. 380.
75. Khan P.K. 1964, J.Obst & Gynaec India, 14;p 393.

76. Kraufmann and Hoeck- *Menstruation and its disorders* p 251 quoted by R.W.Te Linde.
77. Kistner R.W-*Gynaecology principles and practice*, p-247, quoted by Dewhurst.
78. Konar M.-*World Congress of Obst & Gynaec*, Moscow Aug.1973.
79. Loraine J.A.&Bell E.T.- *Obst Gynaec. Surv*22: 467,1967.
80. Mackenzie JZ, Bibby JG *Lancet* 1978; II, 566-569.
81. Milson I, Anderson K, Andersch B, Am. J. *Obst. Gynaec* 1991,164:879-883.
82. Makarainen Lylikarkala O. *Br. J. Obst. Gynaec* 1986:93:974-978.
83. Mitra, A.K. 1964, *J.Obst % Gynaec India*,14:p398.
84. Mackenzie JZ, Bibby JG *Lancet* 1978, II 566-569.
85. Milson I, Anderson K, Andersch B.J. *Obst. Gynaec* 1991, 164:879-883.
86. Makarainen Lylikarkala O.Br. J. *Obst, Gynaec* 1986: 93;974-978.
87. Mitra A.K.1964, *J. Obst. &Gynaec India*, 14 : p 398.
88. Mac Donald Russel 1990Br .J. *Obst Gynaecol* 773-7.
89. Magos A -1991.*Progress in Obst & Gynaecologist* vol.9,375-395.
90. Markee J.E.-Quoted Y Dewhurst J. in 3rd & 4th 1986.
91. Menon M.R -J. *Obst. Gynaec Indian*20;294,1970.
92. Mohsin, *The Journal of & Gynaec* 1999,vol 46,389,384.
93. Mitchel G.G.Mellore S. & Burslem R.W.,*Br.J.Obst Gynaec* 84 :551.
94. Novak E. R. and Woodruff J.D,*Novak's Gynaecology & O bstetric pathology* p 175 ,1874 & 8th edition 1979.
95. Narula R.K., 1967 . *J.Obst,& Gynaec India* 17; p614.
96. Pickles V.R. and Clitheroe H.J. 1960,*L ancet* p 959.
97. Patel S.R., Ravel M.Y,Sheth M.S. , J. *Of PG Fed* 32: 150, 1988.
98. Purandare S Jhalam L-J.*Obst &Gynaec India* 43: 418-21, 1993.
99. Pinion S D Parkin De, Abramovich DR etal, *Br. Med,J.*1994 L:309:979-983.
100. P.K.Devi, (1987), *Dysfunctional uterine bleeding* .P.No 323-331.
101. Quick, A.J.-*Obst. Gynaec N.Y.*28:37,1966.
102. Ramesh S. Krishna K. & Ranjna S.J.J.*Obst &Gynaec India* 30, 723,1980.
103. Rees MGP.Br .J. *Obst Gynaec* 1991; 98 : 327-328.
104. Ritchie G.M. and Giles A.M. J. *Obst Gynaec Brit Imp* 62: p77.
105. Rosario, Y „Pinto 1969, *J. Obst & Gynaec India* 19: p64.
106. Ratnam S.S. Rao,K.B.Arulkumaran A- *PG Obst & Gynaec* Vol-1, Madras , Orient Longman 222-233,1992.
107. Robinson B.F.& Collier J.G.- *Br.J.Hosp. Med* 1981.Oct .26(4),P 396.
108. Rao S.S., S. Lalitha kumari B,*J.Obst Gynaec* 1993;100:244-252.
109. Schosten PC, Van EykerenMA,*University Hospital Utrecht* 1989:pp35-45.
110. Schroeder R-Am J. *Obst.Gynaec* 68:2941,1954.
111. Smith S.K Abel M,Kelly R.W. & Baird D.T.*Lancet* I 522,1981.
112. Sutherland AM.Gylag *Med J*,30;303 1949 Quoted by Dewhurst.
113. Speroff Leon MD, *Clinical Gynaecologic Endocrinology & Infertility-Fifth Edition*.
114. S.Sharma & M.Laghate ,*journal of Obst & Gynaecol* 1993,vol 150 2000, 98-101.
115. S.Samal et al, *The Journal of Obst and Gynaec*, vol, 2000, 100-101.
116. S.S.Ratnam K.Bhaskar Rao , S.Arulkumaran-*Management of DUB* 258-268.

117. Saraiya S.Shekhar N. & Walvekar VR 1994 J.Obst & Gynaecol India 43.
118. Srait saraiya ,Noger Shekhar ,The journal of obs.&gyaneol vol 144,950-953.
119. Shanker sarbajna,biswajit sen, The journal of obs.&gyane,1988,vol 48 61-63.
120. Shaw R W 1994,B.J. obst & gynae 101 suppl 11,15-18.
121. *Shaw Text book of Gynaecology* 11th Edition 1994, 49-54, 320-334.
122. Shekhar Purandre & Lalitha jhalam, The journal of Obs & Gynaecol,1999,vol 43, 418-421.
123. Shepperd BL 1984 *the pathology of DUB clinics in Obst & Gynae*,11 (1),227.
124. Subramanium J. Shamker R, Saxena H,J Obst & Gynae, Greenhill series 1980,p270.
125. Sudha pd. The Journal of Obst & Gynae ,vol.50.,2000,77-79.
126. Te linde R.W.In “*Operative Gynaecology*” 5th Edition p 426,1977 & 6th edition.
127. Turnbull A.C.-J Obst Gynae .Br.Emp.63:179;1956 quoted by Dewhurst.
128. Upadhyay S.N. and M ishra J. J Obst & Gynaec : India 1963, 13 : p 531.
129. Van Burn GA, Vang DS,Clark K.E.Am J.Obst Gynaec: 1992 ;167(3) 828-833.
130. Vam Ejikeran MA, Christians G.C. ,H.I.Am.,J.Obst Gynaec 1992;166 1419-1428.
131. Veena Maheshwari, Chakrabarti , S.P. Tyagi, Rajyashri Sharma. Kiran Alam,S.
132. Wagh K.V. and Swamy ,V.,J.Obst & Gynaecol 73: p985,1957.
133. Weed C.J clinical Obst & Gynaecol 23,885,1980.
134. Wilansky DL 1989 Am J.Obst & Gynaec160,673-677.
135. Willman E.A. Collimus & Clayton S.C. Br. J. Obst.Gynae 83:337:1976.
136. Ylikarkala O,Viinikka L.Br.Obst. Gynaec 1983; 90: 78-83.
137. Ylikarkala O Pekonen F.Obst. Gynaecol 1986, 68: 10-12.