

Dysfunctional uterine bleeding a Clinico Pathological study at Katuri Medical college China Kondrapadu, AP

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Abstract : Back ground ; Dysfunctional Uterine bleeding is a form of abnormal uterine bleeding and it is one of the most common presenting complaints in Gynaecology out patient in all age groups,unassociated with tumor,inflammation and pregnancy. The histological diagnosis of DUB is very essential for adequate management especially in perimenopause and post menopausal females.

Aim and Objective: The present study aimed to study the clinical features and various histological patterns of Endometrium in DUB

Method; Present study is descriptive type of study conducted over 100 cases over a period of one year from April 2015- April 2016 . study was conducted in department of OBG katuri medical college China ,kondrapadu,NTRuniversity of health sciences.the study included atypical uterine bleeding out of which 100 cases of DUB are included based on clinical features and detailed investigations.endometrial tissue was collected by D&C procedure and samples were sent for histopathological examination by pathologist

Results Majority of pts with DUB were in 3rd or 4th decade and were Multiparaous of the 100 cases % of cases showed Histological features associated with DUB. Hyperplasia was the commonest endometrial Pathology (19%) Followed by Luteal phase defiencey (13%) and secretory endometrium (10%) Post abortal (5%) ,Proliferative (5%) Polyip(3%) Exogenous hormone changes (2%) And anovulatory cycles (5%),endometrities including TB (10%)remaining cases(28%)

Conclusion: Menorrhagia is the most common presenting complaint with proliferative phase endometrium. Age has definite influence on endometrial histology. Histopathology remains gold standard method of diagnosis of DUB and its type and to exclude the local causes, DUB occurs secondary to wide variety of functional and structural abnormalities warranting a thorough evaluation especially in peri menopausal females. Cervical cytology is a valuable adjunct however histopathology remains the gold standard in diagnosis.

Key words: Dysfunctional uterine bleeding,Histopathology,Menorrhagia, endometrium .

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I. Introduction

Abnormal clinical bleeding is one of the most common clinical problems in Gynaecology. The cause for the bleeding in women is related to hormonal disturbances, pregnancy complications, bleeding diathesis and more important local pathology,including benign, malignant tumors and infection. Dysfunctional uterine bleeding not associated with organic lesions of uterus. The term DUB applied to any abnormal bleeding including disturbances of the menstrual cycles,regular/irregular uerine bleeding and alteration in the amount or duration of menstrual blood loss, but most commonly implies excessive regular menstrual bleeding or essential menorrhagia. Managementr of DUB is not complete without tissue diagnosis especially in perimenopause and post menopause.

DUB can be classified into primary,secondary and iotrogenic groups. Primary DUB is due to dysfunction in hypothalamo-pituitary ovarian axis or dysfunction in the endometrium itself. Secondary DUB is due to endocrine pathies,haematological,vascular diseases and liver diseases. Iatrogenic DUB may occur due to drugs,exogenous harmone administration and intrauterine contraceptive devices. In most of the cases it is associated anovulatory cycles . leading to a shoot in the estrogen levels which are unoposed due to absence of progesterone. During the adolescence, it may be due to failure of hypothalamo-pituitary system to respond to the positive feedback of estrogen. In the perimenopausal years, the anovulatory bleeding may be due to the decline ing functional capacity of ovary or a careful screeing for maligancncy is imperitive and should be treated promptly.

The aim of study was to evaluate DUB in various age groups and carry out histpathological study of the endometrium . Lateral vaginal wall cytology for hormonal assessment was also undertaken wherever possible.

II. Materials and Methods

The present study was conducted over 100 cases in Katuri Medical college and Hospital, China Kondrapadu.,NTR health Univeristy over a period of one year from March 2015-to April 2016 by collaboration of department of pathology and obstetrics and Gynaecology . All patients were selected based on clinical details along with relavant investigations.

Inclusion criteria: Pts with change in bleeding pattern such as increase in duration or intermenstrual bleeding were included.

Exclusion criteria: Those with evidence of pelvic pathology, hormone therapy within 3 months and IUCD were excluded.

Sample for cytology were collected in premenstrual phase. From ectocervix an dT zone Ayers spatula was used . and smears made were fixed in 95% alcohol withether. Lateral vaginal wall cytology sample was collected and send for Papanicolaou staining. Endometrial tissue collected by endometrial biopsy,dilation and curettage (D&C) and fractional curettage were sent to the pathology lab for evaluation.

III. Results

The age of 100 pts ranging from 13-55 yrs, the pts were categorized into 5 groups with maimum of 39 cases (33%) in the age between 30-39 years while only 7 cases were in the age group of 50-59 yrs.

Pts with DUB presented with varied complaints ranging from hypomenorrhoea to menorrhgia. The most common complaint was Menorrhagia 58% followed by oligomenorrhoea 12% poly menorrhea and metrorrhagia accounted for 6% each and continous bleeding PV was seen in 5% cases, the least no pts 1% each presented with post menopausal bleeding and hypomenorrhoea. An age wise distribution of bleeding pattern revealed menorrhagia as the most common presentation across all age groups.

Clinical presentation of DUB in deferent age group s

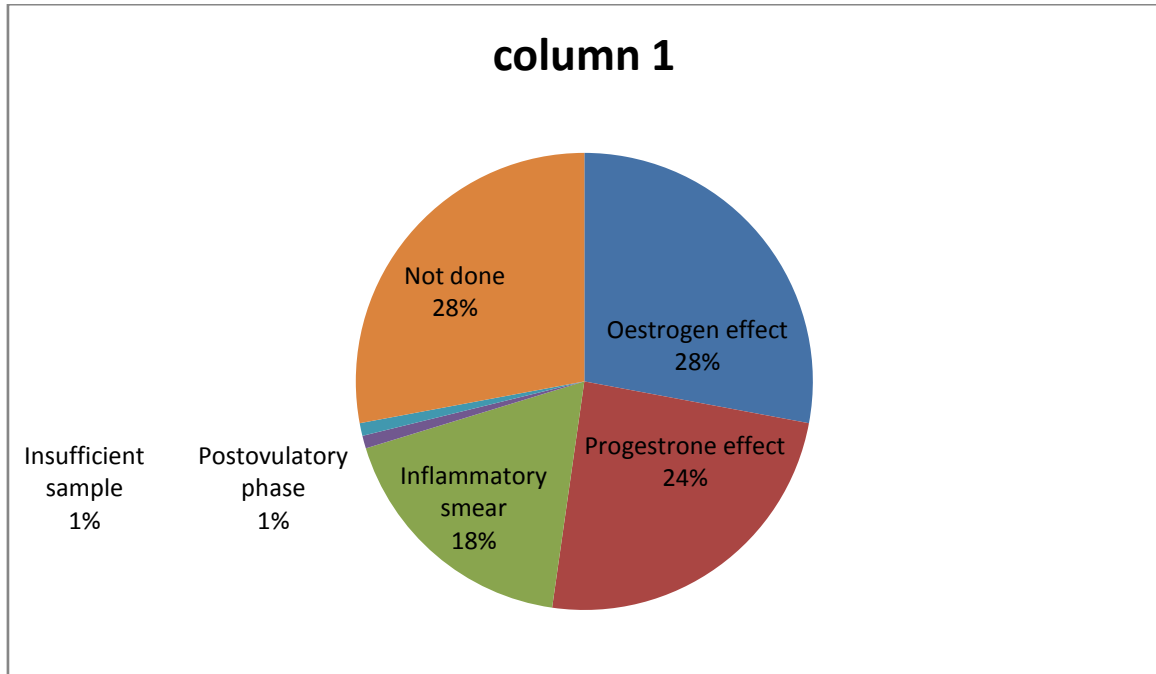
Bleeding pattern	10-19yrs	20-29yr	30-39yr	40-49yr	50-59yr	Total
Menorrhagia	10	8	21	16	43	58
Pulymenorrhagia	-	2	3	1	1	7
Pulymenorrhoea	1	-	1	2	-	4
Metrorrhagia	1	1	1	3	-	6
Menometrorrhagia	-	1	1	3	-	5
Oligomenorrhea	1	5	4	2	-	12
Continuous bleeding	1	-	2	1	1	5
Post menopausal	-	-	-	-	1	1
Hypomenorrhoea	1	-	-	1	-	2
Total	15	17	33	29	6	100

On the basis of parity

Multi para contributes to 38% Nulliparus 21% low parity I and 2 contributes to 15% Grand multipara contributes 20% of the cases. Out of 100 cases 80 cases were taken up for D&C and the endometrial tissue was sent for Histopathological examination The maximum of cases were Endometrial hyperplasia19% flowed by luteal phase insufficiency 13% and secretory endometrium 10% the least no of cases were accounted for hormonal therapy changes.

Histopathological Diagnoses of Endometrial samples in different age groups

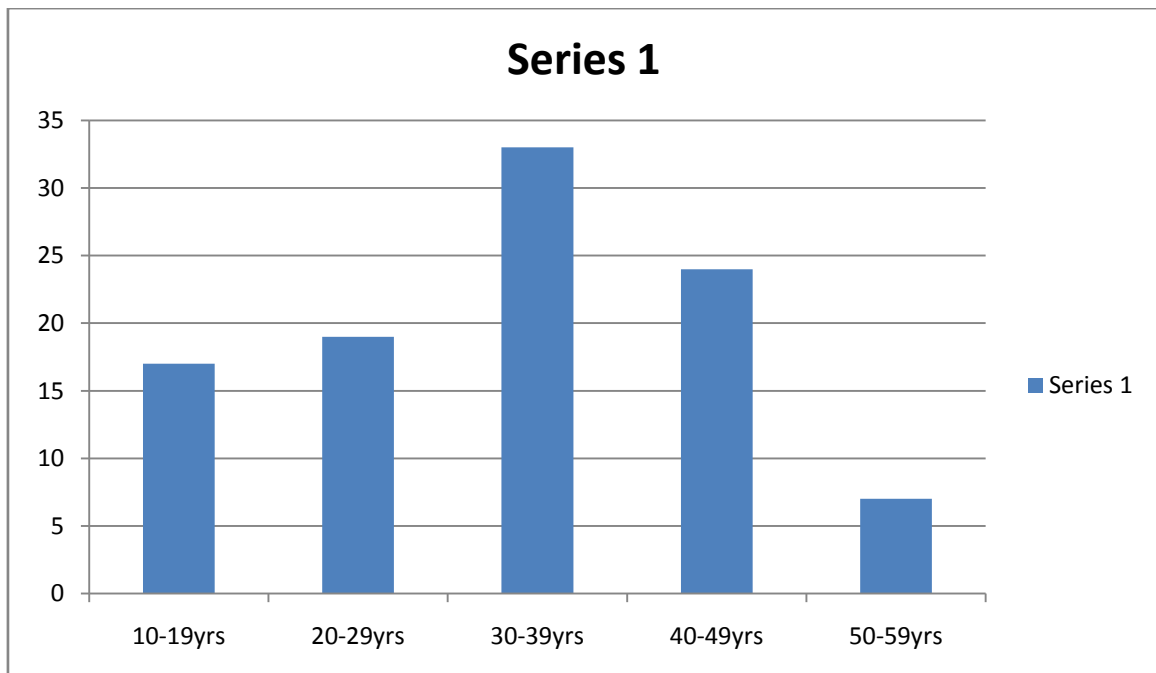
Histopathological findings	10-19yrs	20-29yr	30-39yr	40-49yr	50-59yr	Total
Endometrial hyperplasia	-	2	6	9	2	19
Endometrial polyp	-	-	-	2	1	3
Secretory phase	-	3	4	3	-	10
Proliferative phase	-	1	1	3	-	5
Luteal phase insufficiency	-	2	9	2	-	13
Irregular ripeting	-	-	2	1	-	3
Irregular shedding	-	-	2	-	-	2
Pust abortal curettage	-	3	1	1	-	5
Chronic endometris	-	1	1	5	-	7
Atrophic endometrim	-	-	-	1	2	3
Progesterone therapy changes	-	-	-	2	-	2
TB endometritis	-	1	1	1	-	3
Anovulatory cycles	-	2	2	1	-	5
Not done	20	-	-	-	-	20



Lateral vaginal wall cytology was done in 60 cases maximum no cases showed oestrogen 31cases ,progesterone was found in 27% cases 1% patient had a post ovulatory smear and 20%cases made up for inflamatoiry smear. The distribution of cases is seen

Number of patients

	10-19yrs	20-29yr	30-39yr	40-49yr	50-59yr
Percentage	17	19	33	24	7



IV. Discussion

Dysfunctional uterine bleeding is defined as abnormal uterine bleeding unrelated to anatomical lesions of the uterus. It is largely caused by aberrations in thehypothalamo-pituitary –Ovarian axis. DUB can occur in any type of endometrium both normal and abnormal . Most of the cases occur during adolescence and perimenopausal years .

The evaluation of abnormal uterine bleeding patient is achieved by identifying the DUB cases through various investigations like history, physical examination, laboratory diagnosis, Ultrasonography, and endometrial sampling.

The most likely etiology relates to the patients age as to whether the patient is premenstrual, post menopausal. DUB occurs most often at extremes of reproductive age. Our pts ranged from 13-55 years of age. Maximum representation was of the age group of 30-39 yr (33%) closely followed by pts between 40-49 yrs (24%). Less than twenty years account for 17% of the total study group.

The presenting complaints ranged from hypomenorrhea to menorrhagia. On analysis the distribution of the pts according to bleeding pattern, the most common presenting was of menorrhagia (58%). A steady occurrence of most disorders increasing with advancing age was seen. Commonest age group presenting with excess bleeding was 30-39 years as compared 41-50 yrs.

On the basis of parity Multiparous woman have a slightly more average blood loss compared to nulliparous woman.

Histopathological evaluation was done in 80 cases out of 100 patients. Hyperplasia was commonest endometrial pathology 19% followed by luteal phase insufficiency 13% and secretory endometrial 10% endometritis including tuberculous endometritis 10% post abortal 5% proliferative 5% polyp 3%, atrophic 3% exogenous hormone change 2% and anovulatory cycles 5% made up for the remaining lesions. Endometrial hyperplasia the commonest histopathological diagnosis was observed in 19% cases, all were simple glandular hyperplasia. The incidence of endometrial hyperplasia peaks around perimenopausal and post menopausal women. Identification of endometrial hyperplasia is important as it thought to be precursor of the endometrial carcinoma. The maximum no of patients in our study were in the perimenopausal group and less no in post menopausal women. Abnormal uterine bleeding in these age groups requires further evaluation to exclude malignancies.

Luteal phase insufficiency is a term used to describe a state characterised by relative or absolute abnormality in progesterone secretion following ovulation. This was the second most common diagnosis, contributes 13% cases. Irregular ripening and irregular shedding both of which are morphological features of luteal phase insufficiency along with anovulatory cycles. Secretory endometrium was found in 10% of cases. Proliferative endometrium was seen in 5% cases. Amongst women undergoing endometrial biopsy the prevalence of endometrial polyps is 3%, the incidence raises with increasing age, peaks in 5th decade and gradually decreases after menopause.

Chronic nonspecific endometritis along with tubercular endometritis comprised the inflammatory lesions. A total of 7 cases of chronic endometritis were seen in our study with highest no in the age group of 40-49 years. Chronic endometritis usually follows pregnancy, IUCDS insertion and abortion. It may be due to It may be due to viral, chlamydial or gonococcal infections. Tuberculous endometritis on other hand is known to be associated with infertility menorrhagia, 4 cases of tubercular endometritis were seen in the present study.

The exact cause of bleeding in atrophic endometrium is not known, it is postulated to be due to anatomic vascular variation or local abnormality in haemostatic mechanism. In the present study 4 cases (3%) of atrophic endometrium were seen predominantly in the age group 50-59 years. Uterine bleeding due to pregnancy related complication was observed in young pts (5%) most of the pts were in the age group 20-29 yrs age group.

Lateral vaginal wall cytology was done wherever possible and it was available in 70 pts. A comparative analysis of histopathological and cytological features was done in these patients, estrogen cytology was seen in lesions of hyperestrogenic status on histopathology.

V. Conclusion

Excessive menstrual blood loss is a common reason for women to seek medical help and leads to large demands in health resources. In this study, Dysfunctional uterine bleeding occurred in both the reproductive and the perimenopausal age groups and majority were multiparous. Menorrhagia was the most common presenting complaint with predominance of proliferative endometrium. DUB occurs secondary to a wide variety of functional and structural abnormalities, thorough evaluation is important in women of perimenopausal age group. Menorrhagia is a common symptom and the most likely etiology relates to the patients age. Histopathological examination of endometrium remains the gold standard method of evaluating the DUB cases and its subtypes and to exclude the local causes which helps in early diagnosis and to determine the plan and mode of management.

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