

# ENDOMETRIAL SPECTRA IN WOMEN AT DIFFERENT AGES

by

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## SUMMARY

In a histological study of endometrium in 1084 cases of menstrual abnormalities, malignancy of endometrium was detected in 7 cases (i.e. 0.64%).

Tuberculous endometritis in 1.19% cases. Incidence was higher in patients below 35 years (1.63%) and it was much higher in patients of adolescent age 3.16% (5 amongst 158 patients below 20 years).

Over all organic lesions were detected in 66 out of 1084 i.e. 6.08% cases.

Endometrial hyperplasia was detected in 26.18% cases.

Cystoglandular hyperplasia was noticed six times more frequently in patients above 35 years age as compared to age group below 35 years. In women of age group above 50 years incidence of hyperplasia was 42.85%.

## Introduction

Abnormalities of menstruation (including pathological secondary amenorrhoea) are the commonest complaints in Gynaec clinics.

The cause of the above can be local pelvic pathology or systemic disease or endocrine/metabolic disorder or emotional disturbance.

When systemic causes and local pelvic pathology is excluded, a histopathological study of the endometrium helps to detect endometrial lesions as malignancy, tuberculosis, dystrophies, and hormonal imbalance. No clinical pattern of abnormal menstruation is pathognomonic of ovulation or anovulation and this information

is important for proper management of the patient.

Dilatation and curettage is a simple, safe and reliable investigation from this point of view.

The present study aimed at finding out the incidence of various endometrial lesions|patterns in patients who had abnormal menstruation or secondary pathological amenorrhoea.

## Material and Methods

This paper reports endometrial pictures in 1084 women who reported for abnormal menstrual periods or secondary amenorrhoea (Pathological) at the General Hospital, Solapur during a period of four years from 1st January 1980 to 31st December 1983.

A thorough clinical examination was done in every case to exclude systemic

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causes and local pelvic pathology as fibroids, T.O. masses, cervical malignancy etc.

In all cases of secondary amenorrhoea, pregnancy was ruled out by clinical examination, and urine pregnancy test.

Cases which did not respond by withdrawal bleeding after injection of estrogen and progesterin were only included in the series.

Cases clinically diagnosed as abortion are excluded and so also cases of menstrual regulation.

Endometrium was obtained by dilatation and curettage done in the premenstrual phase, in majority of the patients. In few cases it was done to check bleeding.

Only those young unmarried girls in whom curettage was necessary to check bleeding are included in the series.

In few unmarried nulliparous patients, endometrium was obtained by using menstrual regulation syringe.

Cases are divided into two groups —

- (A) Those upto 35 years of age. This group included 163 patients who besides menstrual abnormality, had primary/secondary infertility.
- (B) Patients above 35 years — This group includes cases of postmenopausal bleeding.

#### Observations

56.27% patients with menstrual abnormalities belonged to age group below 35 years.

14.57% were adolescent (below 20). Only 1.93% were above 50 years.

Clinical diagnosis dysfunctional uterine bleeding (D.U.B.) in 60.02% women of group 'B' (above 35 years) as compared to 31.47% in group 'A' (below 35 years). Menorrhagia, oligomenorrhoea, polymenorrhoea were more common in women below 35 years.

Incidence of postmenopausal bleeding was 8.01% amongst women above 35 years. Wide range of endometrial patterns pathology was observed.

*Endometrial carcinoma*: Incidence of endometrial carcinoma was 0.16% and 1.29% in groups 'A' and 'B' respectively. The patient in group 'A' was of 34 years.

*Pre malignant Conditions*: Dysplasia was noticed in 4 cases in group 'B' (i.e. .86%). Atypical hyperplasia was present in .81% cases of group 'A' and in 3.35% cases of group 'B' (i.e. 4 times more).

*Tuberculous endometritis* was more frequent in patients below 35 years.

Out of 10 cases in this group, 5 cases were below 20 years giving an incidence of

TABLE I  
Showing Age wise Distribution of Cases

	Age groups				Total
	Below 20 years	20 yrs. to 35 yrs.	36 yrs. to 50 yrs.	51 yrs. and above	
No. of cases with menstrual abnormalities	113	334	453	21	921
Number of cases with menstrual abnormalities associated with infertility	45	118	—	—	163
Total	158	452	453	21	1084
Percentage	14.57%	41.70%	41.78%	1.93%	100%
	56.27%		43.71%		

3.16% as compared to 1.1% amongst patients between 21 and 35 years (5 out of 158 in former and 5 out of 452 in later age group). Also out of these 10 cases in group 'A' 7 cases had infertility. Total number of infertility cases studied in this series was 163 giving in incidence of 4.29%.

TABLE II  
Showing type of Menstrual Abnormalities in the Patients

Clinical Type	GROUP 'A'		GROUP 'B'		Total
	Below 35 years		Above 35 years		
	No.	%	No.	%	
D. U. B.	192	31.47	286	60.02	478
Menorrhagia	184	30.16	97	20.46	281
Polymenorrhoea	86	14.09	23	4.85	109
Oligomenorrhoea	31	5.08	2	0.42	33
Hypomenorrhoea/ Scanty period	20	3.27	—	—	20
Secondary amenorrhoea	66	10.81	—	—	66
Metrorrhagia	31	5.08	28	5.9	59
Perimenopausal Bleeding/Post- menopausal bleeding	—	—	38	8.01	38
Total	610	100	474	100	1084

TABLE III  
Showing Endometrial Patterns/Pathology in Cases Studied

Type of endometrium	GROUP 'A'		GROUP 'B'		Total
	No.	%	No.	%	
	Secretory endometrium	184	30.32	66	
Non-secre./Proliferative	150	24.59	82	17.29	232
Hormonal imbalance/Mixed	98	16.06	56	11.84	154
Atrophic endometrium	20	3.26	15	3.16	35
Cystic hyperplasia	52	8.52	77	16.24	129
Cystoglandular Hyperplasia	20	3.28	95	20.04	115
Adenomatous/Glandular Hyperplasia	9	1.47	10	2.1	19
Atypical Hyperplasia	5	0.81	16	3.25	21
Dysplasia	Nil	—	4	0.86	4
Adenocarcinoma of endometrium	1	0.16	6	1.29	7
Squamous cell carcinoma of cervix extend- ing up	—	—	1	0.21	1
Endno/Ut. polyp.	6	0.98	7	1.47	13
Chronic endometritis	18	2.95	11	2.32	29
Tuberculous endometritis	10	1.63	3	0.64	13
Infected/degenerated chronic villi/pro- ducts of conception	35	5.75	17	3.82	52
No opinion possible	—	—	4	0.86	4
No Endome. tissue	2	0.32	4	0.86	6
Total	610	100	474	100	1084

TABLE IV

Showing Endometrial Patterns in Patients Below 20 Years

Type of endometrium	No. of cases	Percentage
Secretory endometrium	48	30.37
Proliferative endometrium	35	22.25
Hormonal imbalance/Mixed pattern	28	17.22
Atrophic endometrium	4	2.53
Cystic hyperplasia	18	11.39
Adenomatous/Cystoglandular hyperplasia	4	2.53
Ut/Endometrial polyp	1	0.63
Chronic endometritis	6	3.7
Tuberculous endometritis	5	3.16
Infected/degenerated chronic villi/products of conception/decidual reaction	9	5.6
Total	158	100

Out of total 13 cases of tuberculous endometritis detected in this series; 2 cases had D.U.B., 2 patients had polymenorrhoea while 9 patients had secondary amenorrhoea.

There were 66 cases of amenorrhoea out of which 9 had tuberculous endometritis giving a fairly high incidence of 13.63%. Chronic endometritis and endometrial polyp were detected in 2.95% and 0.98% in group 'A' (below 35) and in 2.32% and 1.47% in group 'B' respectively. Overall organic lesions as endometrial polyp, endometritis, malignancy were present in 35 cases (5.81%) in group 'A' and 31 cases in group 'B' (i.e. 6.54%).

**Endometrial dystrophies:** Cystoglandular hyperplasia was noticed 6 times more frequently in group 'B' as compared to group 'A' (20.04% and 3.28% respectively) and cystic hyperplasia was present in 8.52% cases of group 'A' and 16.24% cases of group 'B' (above 35 years).

Normal secretory endometrium was present in 30.32% patients of group 'A' as compared to only 13.77% in group 'B'. Hormonal imbalance was detected in 16.06% cases of group 'A' (below 35 years) as

compared to 11.8% cases in group 'B' (above 35 years). Thus failure of ovulation was more frequent in patients above 35 years.

Atrophic endometrium was present in 3.26% and 3.16% cases of group 'A' and group 'B' respectively.

One hundred and fifty-eight patients in group 'A' were below 20 years. Incidence of endometrial hyperplasia in this group was 13.92% (22 cases); of tuberculous endometritis 3.16% and of hormonal imbalance in 17.22%.

Twenty-one patients in group 'B' were above 50 years. Out of these, 5 patients (23.8%) had malignancy. Hyperplasia of endometrium was present in 9 cases (42.85%); proliferative endometrium in 4 cases (19%) and atrophic endometrium in 3 cases (14.2%).

Infected degenerated chorionic villi or decidual products of conception were detected in 52 cases out of 1084 i.e. 4.79%.

#### Discussion

Endometrium as an end organ has an important role in production of menstruation. Clinically, menstrual abnormalities

cannot be correlated with any histological type of endometrium and organic lesions can be detected only by histological study.

In the present series, organic lesions were found in 66 i.e. 6.88% cases. Sutherland (1981) reported organic lesions in 14% cases of D. U. B. (Total 1000 cases studied).

In present series, endometrial malignancy was detected in 7 cases out of 1084 (0.64%). Out of 7 cases, 4 patients were above 55 years (57%); 2 cases were between 46 and 55 years (28.57%) and 1 was below 35 (14.28%).

Silverberg in study of 5000 cases of endometrial carcinoma found 2.4% patients below 40 years. Our incidence appears much higher but number of cases are less.

Tuberculous endometritis was detected in 13 cases (1.19%). Incidence was more in patients below 35 years (1.63%). Amongst the patients below 20 years it was found 3.16%.

Infertility and amenorrhoea were commonly found associated with tuberculous endometritis. In 7 out of 13, there was infertility (53.8%) and in 9 out of 13 cases there was secondary amenorrhoea (68.23%). Prabhakar (1976) reported endometrial tuberculosis in 1.1% in total 3584 cases studied. Khan (1982) reported endometrial tuberculosis in 6.2% cases in a study of 1584 cases. In the present series, endome-

trial hyperplasia was noticed in 26.18% (i.e. 284 out of 1084) cases. Sutherland reported incidence of hyperplasia in 39.4% patients in total 4850 patients of different series. He reported hyperplasia in 15.5% cases of adolescent group. The incidence in present series was 13.92% which is comparable.

In view of the organic lesions and endometrial hyperplasia and varied endometrial patterns, histological study of endometrium is found very important in women of all age groups particularly when conservative management is desired.

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TABLE I

Endometrial Spectra in Women at Different Ages

Age Group	No. of Cases	Percentage
Below 20	1	0.09%
20-35	12	1.11%
35-45	1	0.09%
45-55	1	0.09%
55-65	3	0.28%
Above 65	1	0.09%
Total	1084	100%