ENDOMETRITIS IN RAJASTHAN

by

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Specific and non-specific chronic pelvic inflammations have been one of the major problems in gynaecology. The endometrial currettings, because of their easy availability, have been one of the commonest methods to get an insight of disease process, and, therefore, have been studied extensively by many workers (Gupta, 1957; Gupta & Borokotoky, 1960; Bose, 1960; Hafeez & Tandon, 1965; and Saxene & Arora, 1966). The main emphasis of these workers has been tuberculosis of endometrium.

The present study which is based on the study of 461 endometrial biopsies has been conducted to present the incidence of both specific as well as non-specific inflammations of endometrium.

Material and Methods:

A total number of 5,157 endometrial biopsies received in the Pathology Departments of S. M. S. Medical College, Jaipur, and of Dr. S. N. Medical College, Jodhpur, during the period 1964 to 1967 were carefully examined for evidence of any inflammatory lesions.

Relevant history including that of present illness, menstrual and marital history and obstetric history was recorded. Processing, section cutting and staining of the biopsy material was done by standard techniques. Sections having doubtful evidence of tubercular endometritis were stained for acid fast bacilli.

Observations:

Incidence of various types of endometrial inflammatory reactions during a period of four years is shown in Table 1.

TABLE 1

	No.	Percent
(a) Tubercular endometritis	140	30.36
(b) Acute endometritis	38	8.24
(c) Subacute endometritis	36	7.80
(d) Chronic endometritis	233	50.54
(e) Atrophic endometritis	6	1.30
(f) Syncytial endometritis	8	1.73

Out of a total of 5,157 endometrial biopsies received during this period, 461 (8.84%) showed some evidence of endometritis. Out of these 461 cases, maximum number of cases (233,50.34%) belonged to the group of chronic non-specific endometritis. Other inflammatory lesions noted were acute endometritis (38 (9.24%), subacute endometritis 36 (7.80%), atrophic endometritis 6 (1.30%) and syncitial endometritis 8 (1.73%) cases. Incidence of tuberculous endometritis was found to be 30.36% (140 cases).

Incidence of age and symptoms observed in the present series are depicted in tables ii and iii respectively.

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TABLE II

Showing age incidence in different types of endometritis

Endometritis	Total No. of cases	Age in years									
		20 or less		21-30		31-40		41-50		51 & more	
		No.	%	No.	%	No.	%	No.	%	No.	%
Tuberculous	140	23	16.4	104	74.3	12.	8.6	1	0.7	..	..
Acute	38	12	31.6	20	52.6	6	15.8	..	..	..	..
Subacute	36	5	13.8	19	52.8	7	19.4	4	11.1	1	2.8
Chronic	233	42	18.01	129	55.36	44	18.88	16	6.88	2	0.85
Atrophic	6	1	16.66	..	..	..	..	2	33.3	3	50.0
Syncytial	8	2	25.0	4	50.0	2	25.0	..	..	..	..

TABLE III

Showing incidence of presenting symptoms in different types of endometritis

Endometritis	No. of cases	Primary sterility				Secondary sterility		Functional uterine bleeding	Miscellaneous
		No.	%	No.	%	No.	%	No.	%
Tuberculous	140	57	40.7	36	25.7	24	17.1	23	16.4
Acute	38	10	26.3	7	18.4	11	29.0	10	26.3
Subacute	36	8	22.2	3	8.3	17	47.2	8	22.2
Chronic	233	41	17.5	36	15.4	99	42.4	57	24.4
Atrophic	6	1	16.6	1	16.6	..	..	4	66.6
Syncytial	8	1	12.5	..	..	4	50.0	3	37.5

Histopathological Observations:

(a) *Tubercular endometritis:* Of the 140 cases diagnosed as tubercular endometritis, 86 cases had sufficient histological evidence of tuberculosis in the form of granulomatous lesions composed of caseation, epithelioid cells and Langhan's giant cells (Fig. 1.) Of the remaining 56 cases, 32 had the so called tuberculous granulation tissue without caseation. Ten of these showed the presence of acid fast bacilli. The remaining 14 showed epithelioid granulomas without caseation or Langhan's giant cells. These were diagnosed as tuberculous on the basis of demonstration of the presence of acid fast bacillii.

(b) *Chronic endometritis:* The criteria for the diagnosis of this condition was presence of numerous plasma cells in the endometrium, foci of lymphocytes and polymorphonuclear leucocytes. In some cases mild fibrosis of stroma was also observed (Fig. 2).

(c) *Acute endometritis:* Out of 38 cases diagnosed as acute endometritis, 23 cases showed the histological evidence of the presence of products of conception. A preponderance of acute inflammatory exudate consisting of polymorphonuclear leucocytes was seen in all these cases.

(d) *Subacute endometritis*: Cases which showed histological presence of polymorphonuclear leucocytes, a few plasma cells and lymphocytes but had a good number of eosinophils were put into the group of subacute endometritis.

(e) *Atrophic endometritis*: A variant of chronic endometritis of long standing histologically revealed dense fibrosis of stroma, atrophy of glands with a few foci of chronic inflammatory cells. To differentiate these cases from tuberculous endometritis, serial sections were cut and stained for the acid fast bacilli.

(f) *Syncytial endometritis*: This condition, which invariably is a sequela of abortion, pregnancy or mole was characterized histopathologically by so called "Syncytial wandering cells". These cells which were present diffusely were accompanied by a marked inflammatory reaction consisting of lymphocytes and plasma cells (Fig. 3).

Discussion:

The age incidence and presenting symptoms of the different types of endometritis are given in Tables ii & iii.

The incidence of tubercular endometritis in the present study correlates well with the findings of most of the other Indian workers (Hafeez & Tandon, 1965, Saxena & Arora, 1966, and Bhaskar Rao, 1960). An interesting feature of the present analysis was a complete lack of clinical suspicion of tuberculosis. In only 42 (30%) of the 140 cases diagnosed as tubercular endometritis, a clinical diagnosis of pelvic tuberculosis was made before the biopsy was performed. This is in sharp contrast to the findings of Sharman (1953), Sutherland (1943) and Novak (1967), who all have reported the finding of unsuspected tuberculosis in less than 5% of their cases.

Studies of several workers (Sutherland, 1960, Saxena & Arora, Loc cit, Sharman, 1953, and Hafeez and Tandon, 1965), have established beyond doubt the relationship between primary sterility and pelvic tuberculosis. The present study revealed that approximately 40.7% of the women who were having primary sterility had tuberculosis of endometrium. This finding is much higher than the previous reports of majority of workers (Malkani & Rajani 1953, Sharman, 1965, Gupta 1957 and Rabua & Liquornic, 1957) in this field.

The other common symptoms associated with tuberculosis of the endometrium were secondary sterility (25.7%) and functional uterine bleeding (17.1%). Saxena & Arora, (1966) have reported amenorrhoea to be the second commonest (39%) presenting symptom in their series of cases. In the present study, however, only 5% of the tuberculous endometritis cases presented with amenorrhoea.

Although tuberculosis of endometrium has been described in all ages, the commonest age group has been found to be the third decade of life (Sharman 1953, Haines, 1952, and Hafeez & Tandon 1965). In our series also majority of the cases (74.3%) were of the same age group.

The diagnostic criteria for chronic endometritis, has already been mentioned. A very high frequency 50% of chronic endometritis has been observed in the present study. Farooki (1967) who observed 20% incidence of chronic endometritis in his series has rightly pointed out about uncertainty of histological diagnosis of this entity. What constitutes a significant infiltration of plasma cells and lymphocytes, adequate enough to make a diagnosis of chronic endometritis is largely a matter of personal judgement.

The commonest presenting symptom in cases diagnosed as chronic endometritis was menorrhagia. This correlates well with the finding of Farooki (1967). Majority of these cases (55.36%) belonged to the age group 21-30 years.

The commonest cause of acute inflammation of endometrium is abortion or full term delivery (Novak and Woodruff, 1967). In our series, out of the 38 cases diagnosed as acute endometritis, 23 cases showed products of conception. Farroki (1967) has isolated pyogenic organisms like coagulase positive staphylococci, streptococci and pneumococci from endometrial currettings showing histological evidence of acute endometritis. The incidence of this entity in the present series is much higher (8.2%) than that observed by Farroki (0.6). Endometritis having a good number of eosinophils and a few foci of lymphocytic infiltration were diagnosed as subacute endometritis. The incidence of this entity was 7.8% which is again much higher than that of 1.4% observed by Farooki.

A small number of cases (1.3%) were diagnosed as atrophic endometritis. It is regarded as a variant of chronic endometritis. Out of a total of 6 cases diagnosed as atrophic endometritis 5 were above 40 years, of age.

Syncytial endometritis referred to as typical chorionepithelioma by some workers is merely an exaggeration of the normal penetration of decidua and myometrium by multinucleated cells of trophoblastic origin. In the present series the incidence of this condition was 1.7%.

Summary

5,157 endometrial biopsies received during 1964-1967 in the department of Pathology, S.M.S. Medical College, Jaipur, and Dr. S. N. Medical College, Jodhpur, were examined for evidence of inflammatory changes. Highest incidence of chronic endometritis (50.54%) was followed by tubercular endometritis (30.36%). The data has been presented.

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See Figs. on Art Paper II