

GENITAL TUBERCULOSIS IN AN ENDOCRINE CLINIC

by

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Abstract

In the past two decades many reports have appeared on the subject of female genital tuberculosis. It is not surprising to find a multitude of reports from India where the incidence of tuberculosis is very high. This report is regarding a systematic study of cases of genital tuberculosis attending the Gynaecologic Endocrinology O.P.D. of the K.E.M. Hospital, Parel, Bombay 400 012. The cases included in this study were from patients attending our Endocrine Clinic from January, 1971 to June, 1976. Of the 2,053 cases that attended our O.P.D., 78 were proved to have genital tuberculosis giving an incidence of 3.32%. Secondary amenorrhoea and primary sterility were the prime complaints. Clinical evidence of genital tuberculosis was present in 29.6% of the cases. Histopathologic examination of the endometrium clinched the diagnosis in 55.1% of the cases. Endoscopy clinched the diagnosis in 50% of the cases. Sixteen cases did not get

withdrawal bleeding despite antitubercular treatment and endometrial priming with oestrogens for three cycles. This emphasizes the importance of early diagnosis and treatment.

Material and Methods

The cases included in this study were from patients attending our Endocrine Clinic from January, 1971 to June, 1976. Of the 2,053 cases that attended our O.P.D., 78 were proved to have genital tuberculosis giving an incidence of 3.32%.

The age incidence of our group of 78 cases is as given in Table I. Thus we see

TABLE I
Age Incidence

Age group	No. of patients
Upto 19 years	5
20-24 years	28
25-29 years	19
30-34 years	19
35 and above	9
TOTAL	78

that a majority (60%) were in their third decade of life. Each patient's history was noted and a thorough general and gynaecological examinations were carried out. The investigations included haemogram, urine and stool examination, serial vaginal

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cytology and cervical mucus studies, chest X-ray, hysterosalpingography, histopathological examination—including endometrial biopsy or dilatation and curettage, endometrial culture in a few cases, endoscopy—Laparoscopy or Culdoscopy. After a diagnosis was made the patients were placed on standard anti-tubercular line of treatment viz. Streptomycin, PAS and Isonex for 2 years. Patients were followed up for periods upto two years.

Results

An analysis of the 78 cases revealed the facts as under:

(a) *Symptoms*: The symptoms noted in this series are as shown in Table II. By

TABLE II
Symptoms

Symptoms	Cases	Percentage
Secondary amenorrhoea	45	57.7%
Primary sterility	25	32.1%
Primary amenorrhoea	11	14.1%
Scanty periods	10	12.8%
Irregular periods	10	12.8%
Secondary sterility	7	8.9%
Pain in abdomen	7	8.9%
Constitutional symptoms	5	6.4%

far the commonest symptom is secondary amenorrhoea, being present in 57.7% of our cases. Sterility comes in next with 41%. The least common symptom group is constitutional symptoms (6.4%) such as fever, loss of weight etc. The total is more than 78, as one patient may have more than one symptom.

(b) *Signs*: The significant findings shown by our cases is as shown in Table III. Tubo-ovarian masses were present in 14.1% of the cases. Of the 11 cases of primary amenorrhoea, 2 had poor secondary sex characters giving an incidence of 18.2%.

TABLE III
Signs

Signs	Cases	Percentage
Normal sized uterus	70	89.7%
Smaller than normal uterus	8	11.3%
Tubo-ovarian mass	11	14.1%
Doughy abdomen	10	12.8%
Poor secondary sex characters	2	2.6%

(c) *Investigations*: The investigations which clinched the diagnosis or suggested strong possibilities of genital tuberculosis are shown in Table IV.

TABLE IV
Investigations

Investigations	Cases	Percentage
Chest X-ray	9	11.5%
Endometrial Biopsy	43	55.1%
Endometrial Culture	2	2.6%
Biopsy — (a) Cervical	2	2.6%
(b) Tubal	1	1.3%
Hysterosalpingography	15	19.1%
Endoscopy	39	50.0%

Endoscopy was freely employed in this series. Not only was it utilized to diagnose but was used to follow up cases. Two cases receiving greater than one and a half years anti-tubercular therapy underwent second-look laparoscopy. Diagnostic points included adhesions, tubercles, beaded blocked tubes and the presence of blue uterus after injection of methylene blue, etc. Tubal biopsy was obtained in one case to have histopathologic evidence of tuberculosis. No difficulty was encountered in any of these Endoscopies.

11.5% of our cases of genital tuberculosis had concomittant pulmonary tuberculosis, active or latent. Endometrial biopsy or dilatation and curettage clinched the diagnosis in 55.1% of the

cases. Similarly, a tubal element was present in 70.5% of the cases as shown by hysterosalpingography and endoscopy.

(d) *Follow up*: We have not had a very good follow up despite writing several post cards and despite social workers' visits. A total of 36 patients were followed up. The distribution is shown in Table V.

TABLE V
Follow-up

Duration	Cases	Percentage
Upto 6 months	15	19.2%
6 months to 12 months	16	20.5%
Over 12 months	5	6.4%
TOTAL	36	46.1%

There were no pregnancies in this series. Ten of the 36 cases started menstruating spontaneously. The menses of 4 of these 10 women were regular and scanty, the other 6 being irregular. Seven responded to cyclic oral oestrogen therapy. Nineteen did not respond to

gic O.P.D.) gives a figure of 1.1%. Schaefer (1976) quoting world figures gives selective incidence as follows:

- (1) In patients with pulmonary tuberculosis : 10%-50%
- (2) In tubes removed surgically : 2%-20%
- (3) In sterile patients : 5%-10%

If we consider age incidence, our figure of 60% in the third decade of life is in agreement with those of other authors—Bose (1959)—56.2%, Malkani and Rajani (1959)—68.6%, Bhaskar Rao (1959)—58%, Devi (1962)—70%.

Secondary Amenorrhoea was the commonest symptom—57.7%. Bhaskar Rao (1959) found a similar incidence of 55.2% for secondary amenorrhoea and 15.5% for oligomenorrhoea (12.8% in our series). Sutherland (1954) figures were different. Of his series of 325 cases 8% had amenorrhoea and 14.8% had menorrhagia or irregular bleeding. The incidence of menstrual disorders is as shown in Table VI.

TABLE VI
Incidence of Menstrual Disorders

Sr. No.	Author	Cases	Oligo or Amenorrhoea	Menorrhagia or irregular menses	Normal menses
1.	Sutherland 1951	178	26 (13%)	66 (37%)	86 (50%)
2.	Pathak 1965	112	81 (71.6%)	18 (16%)	11 (10%)
3.	Heera 1971	140	99 (57.5%)	24 (17.25%)	37 (25.25%)
4.	Present series	78	66 (84.6%)	10 (12.8%)	2 (2.6%)

cyclic therapy.

Discussion

The incidence of genital tuberculosis in our Endocrine Clinic patients is 3.32%. No similar figures are available. Bhaskar Rao (1959) quotes an incidence of 0.76% of genital tuberculosis whilst Anjaneyulu (1959) (in women attending a gynaecolo-

gic O.P.D.) gives a figure of 1.1%. Schaefer (1976) quoting world figures gives selective incidence as follows:

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In our clinic we are referred cases with menstrual abnormalities. Thus there is a small percentage of patients with normal menses 2.6% in our series. Only 12.8% had irregular menses. There was no patient with menorrhagia in our series. Oligomenorrhoea or amenorrhoea being the predominant menstrual anomaly in 84.6% of our cases. As noted by

Schaefer (1970) complete destruction of the ovary by genital tuberculosis seldom occurs. This happened in 2 of our cases of primary amenorrhoea. We agree with Malkani and Rajani (1959) and who attribute amenorrhoea to end organ failure secondary to endometrial caseation.

Infertility in our series was 41%. This figure is much less as compared to that of Stallworthy (1952) 57%, but similar to that of Sutherland (1954) 43.7%, Ylinen 43.1%. Bhaskar Rao (1959) reports 11%.

Pain in the abdomen was present in 8.9% of our series. Sutherland (1954) reports a 23.4% incidence. A doughy abdomen was present in 12.8% of our cases. Hafeez and Tandon (1965) reports a 25.7% incidence of tuberculous endometritis in patients with a doughy abdomen. Tubo-ovarian masses were present in only 14.1% of our cases as against 48% reported by Sutherland (1954).

In our series 11.5% had evidence of pulmonary tuberculosis. Schaefer (1976) reports a 29% incidence at the New York Hospital. Cervical tuberculosis was present in only 2.6% of our cases. Schaefer (1976) reports the incidence of cervical tuberculosis as varying from 5%-15%. Our incidence is low because patients with cervical tuberculosis having no menstrual anomaly are not referred to us.

Endoscopy, for the first time in India has been used so extensively in the diagnosis and management of genital tuberculosis. We strongly believe that this mode of investigation helps us to catch many more cases that would have been missed if only endometrial biopsy and hysterosalpingography had been used. Endoscopy clinched the diagnosis in over 25% of the cases, which otherwise would have been missed.

Our follow up has been poor—46.1%. No pregnancies have been reported.

Schaefer (1976) reviewing 7000 cases from the literature found—(1) 155 full term pregnancies (2.21%) of which only 31 had definite proof of genital tuberculosis, (2) 65 abortions (0.9%) and (3) 125 ectopic pregnancies (1.86%). Patients who come late do not respond to oestrogen withdrawal by bleeding despite adequate treatment.

Summary

1. Seventy-eight cases of genital tuberculosis from our gynaecologic endocrinology clinic were reviewed, giving an incidence of 3.32% of all the cases from this O.P.D.

2. Secondary amenorrhoea and primary sterility were the prime complaints.

3. Clinical evidence of genital tuberculosis was present in 29.6% of the cases.

4. Histopathologic examination of the endometrium clinched the diagnosis in 55.1% of the cases. Endoscopy clinched the diagnosis in 50% cases.

5. Sixteen cases did not get withdrawal bleeding despite anti-tubercular treatment and endometrial priming with Oestrogen for 3 cycles. This emphasizes the importance of early diagnosis and treatment.

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We thank Dr. C. K. Deshpande, Dean, K.E.M. Hospital and Seth G.S. Medical College and Dr. V. N. Purandare, Head, Department of Obstetrics and Gynaecology, for allowing us to publish the Hospital data.

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