Iranian J. Publ. Hlth,
Summer 1975, Vol. 4, No. 2

FEMALE GENITAL TUBERCULOSIS ISFAHAN
A 10 YEAR CLINICOPATHOLOGIC STUDY.

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ABSTRACT

The results of 10 year clinico - pathologic study about female genital tuberculosis in Isfahan is reported. The main aims of this investigation were to study and review the tuberculosis of female genital tract, to evaluate the influence of treatment and above all, to attempt to gain a better insight into the relation of infertility to this disease. In this study the following points have been taken into consideration : age incidence, previous health, presence or absence of other forms of tuberculosis, principle symptoms, bacteriologic and histologic findings, the frequency of unsuspecled endometrial tuberculosis, cases treated medically and surgically, and conception rate following treatment. The diagnostic procedures used in detection of these cases included : endometrial currettage biopsy, bacteriologic and histopathologic examination of tissues removed from female genital organs, and laparotomy.

INTRODUCTION

It has been well established that female genital tuberculosis is not uncommon in Iran (1). The true frequency, however is difficult to retermine because many cases occur that are not diagnosed. However, the incidence of genital tuberculosis varies considerably with the geographic location being studied and with the type of patient under consideration. When the incidence of plumonary tuberculosis in a particular area is above normal, one may expect a high incidence of genital tuberculosis, since it is found in approximately 10 per cent

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of patients with pulmonary diseas (2). The incidence is also higher in clinics where patients are studied extensively because of infertility. This increase may be attributed in part to the large number of endometrial biopsies or diagnostic curettage performed in patients with infertility, Irregular uterine bleeding, or amenorrhea.

Material & method

We have attempted in this study to review by combined histologic, bacteriologic and clinical evaluation, the hospitalized patients with female genital tuberculosis in Isfahan university allied hospitals for a 10 year period, 1341 to 1350, (1962-1971). The site of involvement, chief complain, age and the pathologic and bacteriologic - confirmations on 80 patients with female genital tuberculosis in 10 year period period were gathered and tabulated.

RESULTS

In this female tuberculosis occured with greatest frequency between the ages of 20 and 40 years. There were however 14 patients over 40 and 10 under 20 years of ages.

TABLE - 1 Age distribution in patients with genital tuberculosis.

Age incidence	No of patients	per-cent
0-10	2	2.5
	8	10
21-30	20	25
31-40	36	45
41-50	10	12.5
51-60	4	5
Total	80	100

There were only 10 cases (12.5%) of active tuberclosis in the families of the patients under study. All of the patients (100%) showed positive manteux tuberaulin test. 45% of them gave a history of, or showed evidence of tuberculosis elsewhere in the body. 55 patients (68.7%) gave a history of Abdominal pain; 20 patients (25%) showed evidence of adnexal mass. Other symptoms were, Irregular menses (6.25%), Amenorrhea (5%), Ascites (5%), Slight anemia (80%), and slight fever in 40% of cases:

TABLE 2 : Most commons symptoms and sign in the patients with female genital tuberculosis

Symtoms & Signes	No of Cases	Percent
positive manteux test	80	100
Abddminal pain	55	68.7
History of old pulmonary tuberculosis	36	45
Infertility	30	37.5
Adnexal mass	20	25
Irregular menses	5	6.25
Amenorrhea	4	5

The menstrual disorder has been most commonly decreased flow followed by amenorrhea. The fallopian tubes were involved in all of the cases either independently or in coexistance with other sites.

TABLE 3 : The sites of involvement in the patients with genital tuberculosis

Organ involved	No of Cases	Percent
Tubes	8C	100
Endometrium	24	30
Peritoneum	8	10
Overy	4	5
Cervix	0	0

Besides all of the available routine laboratory tests, all of the patients undergone a D & C. The currttage having been performed in the investigation of infertility, menstrual disorders or becausc of suspicion of pelvic tuberculosis. Laparotomy was performed in the patients undiagnosed by D & C. Bacteriologic confirmation was obtained in 40% by culture. Diagnostic confirmation by guinea pig incoulation was not used in any of these cases. Medical treatment used in patients included the adiminstration of the three main antituberculous drugs, (Isoniazid 100 mg by mouth, 3 times daily; streptomycin 1gm inttramuscularly 2-3 times weekly: P.A.S 3 gm. 4 times per day) for 3 months followed by using a combination of any two of these drugs as maintenance therapy for a year.

Surgical treatment have been done in the followings :

a- in the patients over forty

b- In the patients with adnexal masses

c- in more advanced forms of the disease
d- in cases which were first diagnosed by laparotomy

TABLE 4: Methods of treatment in the patients with female genital tuberculosis

Method of treatment	No of Cases	Per-Cent
Medical treatment only	34	42.5
hysterectomy and bilateral salpingectomy	32	40
hysterectomy and bilateral salpingo-oophorectomy	14	17.5

The death in 6 cases occurred in early days after operation due to postoperative compplications, and the reamining 18 cases died because of the underlying tuberculosis during the first 6 month after operation. There were only 4 cases (nearly 12%) of pregnancy following the medical treatment which ended in abortion.

DISCUSSION

Very varied views have been expressed on the question of the incidence of the female genital tuberculosis. The incidence is difficult to determine and in an attempt to clarify this point, the subject should be studied from a number of aspects, namely from the accumulated histological material and from the clinical records including the patients who refer for infertility and various types of abnormal uterine bleeding. Also it must be remembered that the incidence of female genital tuberculosis varies directly with the geographic, economic and the endemic rate of pulmonary tuberculosis, in any community (3). The unsuspected cases of endometrial tuberculosis may be much more frequent that its is thought. These women who harber such on occult tuberculous infection, must being sought, for they are not ill, and the diagnosis of their disease must eventually be established by histologic or bacteriologic study of the endometrium. The striking low inclidence of endometrial tuberculosis in some countries has been regarded with skepticism by some. This alleged impairment of diagnostic reliability has been attributed to a poor index of suspicion on the part of both clinicion and pathologists.

Halbrecht (4,5) reported that the simultaneous use of both histologic and cultural methods increase diagnostic acumen by more than 25%. Latent endometrial tuberculosis has been reported as high as 10% among unselected Indian women subjected to endometrial biopsy (6). Sutherland (7,8) reported the incidence of endometrial tuberculosis in 5521 D & C, as 10%. In 65943 clinical records 0.27%, in 3804 infertility cases 5.6%, in 100 patient with D.U.B. 1% and in 200 young patient 4%, in 1000 postmenopausal 0.1% and in 330

ectopic pregnancy only 1 case had been due to tuberculosis. He considers female genital tuberculosis as a manifestation of a generalized disease, not surprisingiy, he reports that in nearly half of his cases there have been at — sometime or another, other forms of the disease. From a practical standpoint it is important to note that a positive past history of tuberculosis is very helpful in suspecting female genital tuberculosis, its abscence is of little significans (9). The pelvic examination in women having early tubal tuberculosis is usually completely nomal. Unfortunalely there is no single sympton typical of the disease in advanced cases. Chest X-Ray should be taken routinely, olthough active pulmonary tuberculsis is not frequently associated with pelvic tuberculosis. Endometrial curettage ispreferable to endometrial biopsy and should be performed in the immediate premenstrual phase of the cycle, Endometrial biopsy may be performed, after creating a pseudopregnancy with progestational agents.

As the final diagnosis of the majority of cases are based predominantly on histological findings the alternative diagnosis of granulomatous lesion of the endometrium are sarcoidosis, histoplasmosis and foreign body reaction. Bacteriologic confirmation and sensitivity studies sould be sought in every cases. The tubercle bacillus can be cultured from the endometrium of at time of diagnostic curettage wich should be done in the premenstrual days: (4,5) Special specimen are set aside for this purpose without fivxture. Halbrecht reported positive results in almost 40% of patients when menstrual blood was cultured, compared with 63 percent when an endometrial biopsy specimen was cultured.

Whenever the tubogram reveals evidence of blockage in the course of a sterility work up, the physician should strongly suspect tuberculous salpingitis Inadequate treament seriously increases the risk of reactivation, prolongs morbidity, and invites bacterial resistance. Schaefer (10,11) has suggested the follwing summary of treatment. The optimum treatement for genital tuberculosis combines surgery with pre & postoperative use of the antituberculous durgs, Althoug there is still considerable disagreement as to wether all three main drugs should be used simultaneously or whether a combination of any two is adequate, it is certain that short term chemo-thrapy for pelive tuberculosis is worthless. When the patient is over age 40 complete removal of the uterus and adenexa serves the best interest of the patient. The chances of pregancy and its normal progression to term may be as low as 2 percent par year with a difinitive danger that pregnancy may occur in follopian tube, but this chance is better in patients treated for tubal tuberculosis than in patients treated for endometrial tuberculosis (11). At the end it is important to remember that despite the impression that tuberculosis is a rare occurence it will be wise to bear the possibility in mind when confronted by women with pelvic complaints or woman who have history of miscarriage, and pelive tuberculosis must still be accepted as a potentially serious problem, despite the advance of the

last two decades.

SUMMERY

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