Incidence of Genital Tuberculosis in Infertile Women

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Abstract

A retrospective analysis of the case records of patients attending the University Hospital, Tabriz, showed that over a period of 16 months, 91 patients consulted for treatment of infertility. Genital tuberculosis was diagnosed at laparotomy and confirmed histopathologically in 21 (23.08%) of these patients. Genital tuberculosis is rare in Western Europe and U.S.A. but is still an important factor in causing infertility and sterility in the developing countries. It is therefore suggested that every patient consulting for infertility in developing countries, should be investigated for tuberculosis of the genital tract by means of Laparoscopy histopathological and bacteriological studies. (JPMA 35 278, 1985).

Introduction

The incidence of female genital tuberculosis varies in different parts of the world. It is much more common in India where figures as high as 10% to 15% have been reported among selected and unselected Indian women subjected to endometrial biopsy for primary infertility.\(^1\,^2\) Hutchins reports an incidence of 0.05%\(^3\) Sutherland 1%\(^4\) and Israel 0.25% of all the gynaecological admissions.\(^5\)

Recent reports in the literature have indicated a decline in the incidence of genital tuberculosis in the developed world, but it remains a common cause of infertility in many other areas of the world, including Iran. The following study was undertaken to evaluate the incidence, symptomatology and procedures employed in the diagnosis of genital tuberculosis in the Azerbaijan province, which is located in the North Western part of Iran and has a high incidence of tuberculosis in general.

Material and Methods

Case records from March 1976 to July 1977, of the University Hospital, Tabriz, Iran, were scanned for cases of tuberculous of the female genital tract. The search was limited to gynaecological patients with infertility as the chief complaint. All patients who were admitted for indoor work up of infertility were classified as having either primary or secondary infertility. The total number of patients was ninety one and their duration of infertility ranged from two to fifteen years. Pre-admission work up included routine haematological studies, postcoital test, Hysterosalpingography and semen analysis of the husband. No bacteriological studies were done. All patients underwent laparotomy.

Results

Evidence of pelvic tuberculosis was found in 21 of the 91 patients. The age distribution ranged from 20 to 35 years. Six patients had secondary infertility and their parity ranged from one to eight. The most common symptoms were lower abdominal pain and abnormal uterine bleeding. Some patients however were completely asymptomatic, and were diagnosed at laparotomy (Table I).
Past history of active tuberculosis was not available in any patient and none of the chest x-rays showed evidence of primary infection. The ESR was elevated in almost all the patients, range being 15-25 and 108-122 in the first and second hours respectively. Hysterosalpingography showed abnormal findings in six cases, ranging from complete occlusion of tubes to just thin fallopian tubes with flocculation of the contrast material in their lumina. Tuberculous involvement of the pelvic organs, ranging from mild beaded tubes to wide spread disease in the pelvis with dense adhesions was seen at laparotomy in all the cases. Biopsies taken from appropriate sites confirmed the diagnosis on histopathological examination.

**Discussion**

This study showed a much higher frequency of genital tuberculosis (23.08%). The age distribution was similar to that reported by other\(^5,6,7\) In a review, Schaefer\(^8\) has pointed out the importance of considering genital tuberculosis in the differential diagnosis of infertility particularly in the younger age group. Hysterosalpingography alone is evidently not fully rewarding. It is therefore important to include curettage. Endometrial specimen so obtained should be studied both bacteriologically and histopathologically when investigating patients of infertility. Retrospective analysis of our records showed that most often bacteriological studies were neglected in preoperative investigations. Histopathology alone is not the most accurate way of diagnosing tuberculosis but it is at least a practical and reliable method of ruling out Giant cell producing granulomatous disease\(^7,8\). The prognosis of infertility in genital tuberculosis is poor even with modern antituberculous chemotherapy. There have been some full term pregnancy reports after chemotherapy,\(^9\) but still the rate of term pregnancy after successful treatment of genital tuberculosis is only about 1-2%. It has been proved that tuberculosis of the genital organs causes maximal damage during adolescence, near menarche.\(^10\) Considering this and the poor prognosis for infertility the most beneficial outcome would be control of tuberculosis in general.
References