

## PROSPECTIVE ANALYSIS OF SHORT COURSE CHEMOTHERAPY IN TUBERCULAR ENDOMETRITIS IN FIELD CONDITIONS

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### SUMMARY

Short course chemotherapy (2SHRZ/7HR) of nine months duration was given in 57 histopathologically proved endometrial tuberculosis patients. Repeat biopsy of all the patients who completed 9 months therapy showed proliferative phase of endometrium after three months. Fifty-four per cent of those who completed the therapy showed subsidence of the presenting symptoms. Shortcourse chemotherapy appears to be quite effective in patients of endometrial tuberculosis with zero per cent toxicity.

### INTRODUCTION

There have been conflicting reports regarding rifampicin and isoniazid for 9 months with supplementation of other drugs for 2 months as an effective treatment for extrapulmonary tuberculosis (Behera and Jindal, 1990; British Thoracic Society, 1988). In pulmonary tuberculosis, it has been shown that by including pyrazinamide in the initial treatment, six months treatment is satisfactory (British Thoracic Society, 1984). Apart from convenience to the patient, better compliance and less exposure to potential toxic drugs

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have been cited as points in favour of short course chemotherapy. Keeping this in view, the present study has been undertaken to find the effect of 2SHRZ/7HR regimen in patients with endometrial tuberculosis.

### PATIENTS AND METHODS

Fifty-seven consecutive cases of endometrial tuberculosis patients were included in the study on the following criteria

1. There should be typical histopathological evidence of genital tuberculosis on biopsy of pre-menstrual endometrial issue or on demonstration of tubercle bacilli from

menstrual blood or culture of the uterine curettings.

2. The patient should belong to 15-65 years age group.

3. History of previous chemotherapy less than 15 days.

4. The patient should not have associated diabetes mellitus, liver disease and should not be an alcoholic.

All the patients were thoroughly motivated and the success of motivation was assessed by using motivation assessment scoring scale (Arora and Bedi, 1988). They were put on 2SHRZ/7HR with the following dosage schedule.

Streptomycin (A) - 20 mg/kg

Isoniazid (H) - 5 mg/kg

Rifampicin (R) - 10 mg/kg

Pyrazinamide (Z) - 25 mg/kg

The treatment was on out-patient basis and was self administered. All the patients were given free drugs and were asked to collect the drugs from their local hospital. If the drugs were not available there, they should collect the same from the institute hospital itself.

Repeat endometrial biopsy was done after 3 months and those subjects who showed continuous histopathological evidence of tuberculosis were subjected to another biopsy after 6 months.

Improvement was monitored by keeping the following criteria in mind:

1. Repeat histopathological examination of endometrial biopsy should be normal.

2. Subsidence of presenting symptoms.

3. Overall subjective improvement.

The patient was labelled as 'cured' when the repeat histopathological examination of endometrial biopsy was negative with subsidence of presenting symptom.

The patient was labelled as 'quiescent' when the presenting symptom had not subsided but the repeat histopathological examination of endometrial biopsy was negative and any two of the following other symptoms subsided/returned to normal.

a) Improvement in general debility

b) Subsidence of fever

c) Increase in weight

d) Improvement in ESR which was checked up periodically.

## RESULTS

The patients belonged to the age group of 21-64 years (Mean age: 28). All patients had complaints of general malaise. Thirtytwo patients reported with menstrual disturbances, out of which amenorrhoea was present in 18 cases, profuse bleeding in 7 cases, irregular bleeding in 4 cases, scanty menses in 2 and dysmenorrhoea in one case. Twelve patients reported with complaint of infertility in which hysterosalpingography was done and fallopian tube was found bilaterally blocked in 7/12 cases. Thirteen cases presented with the following symptoms: occasional fever (6), feeling of weakness more pronounced in the evening (5), and loss of appetite (1). Eight out of

57 subjects had extra-genital involvement also.

Out of 57 cases, 46 were diagnosed on typical histopathological presentation of endometrial biopsy and 6 with positive culture of menstrual blood for tubercle bacillus and 5 with positive tissue culture apart from typical histopathological confirmation. In the 4 cases with lung parenchymal involvement, there was minimal lesion with culture negativity for tubercle bacillus. Four patients had associated tuberculous lymphadenopathy. ESR was within the range of 18-100 mm/1st hour (Mean: 52mm/hr).

Forty-six patients who completed 9 months of therapy showed improvement in their symptoms, and all showed proliferative phase of endometrium after 3 months of anti-tuberculosis therapy.

The patients were followed up for a period varying from 7 months to 2 years. Eleven patients were untraceable after 2 months of therapy from the institution. None of these cases responded back even after writing letters and were thus declared lost.

Drug toxicity was zero per cent and minor side effects like loss of appetite and giddiness were noticed in 10 cases who continued the therapy after re-assurance.

### DISCUSSION

In spite of the fact that tuberculosis and tubercular endometrium are fairly common in India, no study is available on the effect of short course chemotherapy in these patients, even though some studies are available in other extrapulmonary tuberculosis (British

Thoracic Society, 1988; Behera and Jindal, 1990)

The authors feel that the lack of studies is basically due to the fact that no clear-cut criteria presently available to monitor the efficacy of the treatment unlike in cases of pulmonary tuberculosis where sputum status is taken to declare the patient as cured. The present criteria followed by the authors is therefore a beginning for further controlled studies. It is well known that tubercles are more often seen in the endometrium removed by curettage on the premenstrual phase and are more commonly located in the endometrium adjacent to the tubal ostia (Matingly and Thompson, 1985). Therefore, if biopsy is not taken from the exact site, then the report may be misleading especially during follow up of cases.

Even though 46 (80%) patients completed 9 months of therapy and had shown histopathological change after 3 months of anti-tuberculosis therapy, the subsidence of the presenting symptom was present only in 25 cases (54%) after 9 months therapy, and hence were labelled as cured. In rest of 21 cases (46%) who completed 9 months of therapy, even though the complaints of general malaise and improvement in the ESR had occurred, the presenting symptom of menstrual disturbance (10 cases) and/or infertility (11 cases) persisted. Persistence of these symptoms appear to be due to the fibrotic changes that have already occurred in the patients of endometrial tuberculosis even before the diagnosis has been made. Fibrotic changes that occur due to the healing process during chemotherapy may also result in persistence of symptoms in the subjects. Such patients, though technically speaking were

'cured', were labelled as quiescent. They require long follow up before we label these patients who had shown subsidence of presenting symptom remained well after the follow up ranging 7 months to 2 years. However, 21 (46%) patients put under the category of 'quiescent disease' had continued to feel subjectively better with no further worsening of symptoms.

Eighty per cent compliance rate in the patients was possible due to the intensive motivation done in these patients based on motivation assessment scoring scale and pos-

sibly due to the zero per cent toxicity of the anti-tuberculosis therapy.

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