

Hepatoprotective role of Liv.52 against Hepatitis induced by Antitubercular drugs

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ABSTRACT

This was a study on 70 cases of pulmonary tuberculosis. A thorough medical examination was carried out which included haematological, biochemical, radiological and histopathological studies.

Patients were in the age group of 12-60 years and receiving antitubercular drugs. Liv.52 was given to every alternate patient to judge its effectiveness to prevent hepatic damage due to these drugs.

In the Liv.52 group only 1 out of 35 developed jaundice as against 5 out of 35 in the non-Liv.52 group. Liv.52 appears to have protected the liver against drug toxicity and the patients regained appetite and weight within 6-8 weeks of therapy.

INTRODUCTION

Antitubercular treatment (ATT) is known to cause various harmful effects like increased streptomycin toxicity in the aged and increased chances of retrobulbar neuritis in the paediatric group, even when given in properly calculated doses based on the age and body weight of the patient. Other common side-effects range from temporary nausea and vomiting to rather severe jaundice.

MATERIAL AND METHODS

The present study was conducted over a period of 2 years at the Department of Medicine, I.M.S., B.H.U., correlating chest and tuberculosis with the nephrology unit. A total of 70 cases of pulmonary tuberculosis was studied to help reveal any hidden incidences of renal involvement and to throw some light on modifications required in the line of treatment with particular reference to side-effects. The patients were in the age group of 12-60 years (average age 35.82 years) and the male : female ratio was 5 : 2.

Liv.52 was given to every alternate patient to judge its effectiveness in preventing hepatic damage. Patients weighing more than 30 kg received Liv.52, 2 tablets t.i.d. and those weighing more than 50 kg received Liv.52, 3 tablets t.i.d.

All the cases were thoroughly investigated after obtaining a detailed clinical history. A thorough medical examination was conducted and the results were recorded on a pre-determined proforma for:

- A) Haematology - Haemoglobin, total and differential counts and ESR.
- B) Biochemistry - Blood sugar, blood urea, liver function test, serum creatinine and electrolytes.
- C) Radiological - X ray chest, X-ray KUB (Kidney urinary bladder) and ultrasound of the abdomen were done in all the cases to assess the pulmonary region, kidney size and damages respectively. IVP was done in selected cases where specific renal indications were present.

D) Histopathology - Kidney biopsy was done in all the cases where kidney size was within normal limits.

OBSERVATIONS AND DISCUSSION

In the first group (Liv.52), only one patient out of 35 cases (2.8%) developed clinically apparent jaundice.

In the other group, where Liv.52 was not given, 5 out of 35 cases (14.2%) developed jaundice.

All the six patients who developed jaundice had raised levels of serum bilirubin, alkaline phosphatase, SGOT and SGPT. Interestingly the patient who was receiving Liv.52 along with ATT developed jaundice only on the 6th day, which could have been due to hypersensitivity caused by rifampicin. However, in the other group, two patients developed jaundice in the 8th week, one in the 10th week and the remaining two in 14 weeks' time. This long duration rules out any allergic (hypersensitivity type) reaction and confirms that the jaundice was due to liver damage.

CONCLUSION

The results clearly indicate that Liv.52 coverage protects patients against hepatotoxicity due to antitubercular drugs. These patients regained appetite and weigh within 6-8 weeks of therapy.

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