

Management of tuberculosis in drug induced hepatitis

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Abstract

Though the basic principles of management of Tuberculosis remain the same in special situations like liver disease and other diseases, the drugs or the regimes have to be modified or even duration of therapy requires modifications. The management in drug induced hepatitis is discussed.

Keywords: tuberculosis, hepatitis.

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INTRODUCTION

TB is a serious public health issue in India causing immense morbidity, mortality and distress to individuals, families and communities. TB kills more adults in India than any other infectious disease.⁷ Tuberculosis is an infectious disease caused by Mycobacterium tuberculosis. Pulmonary tuberculosis is the most common form of TB (more than 85% of all TB cases), while extra-pulmonary tuberculosis can affect almost any organ in the body. Transmission occurs by airborne spread of infectious droplets and droplet nuclei containing the tubercle bacilli. The source of infection is a person with sputum smear positive pulmonary TB. Transmission often occurs indoors, where droplets and droplet nuclei can stay in the air for a long time.⁷ The RNTCP applies the WHO recommended DOTS (Directly Observed Treatment Short-course) strategy. In RNTCP, Isoniazid (H), Rifampicin(R), Ethambutol (E), Pyrazinamide (Z) and Streptomycin(S)⁸ are the anti TB

drugs used for DOTS treatment from 6-9 months according to the categories. Though the basic principles of management of tuberculosis (T.B) remain the same in drug induced hepatitis the drugs or the regimes have to be modified or even duration of therapy requires modifications. The management of tuberculosis in drug induced hepatitis is being discussed briefly.

CASE REPORT

Mrs. S. 45 yrs. Old female presented with Cervical L.N. Pathy fever and generalized weakness of 4 weeks duration. Fine needle aspiration cytology showed tubercular lesion. Chest ski gram was normal and sputum for acid fast bacilli by smear microscopy was negative other hematological and biochemical parameters were within normal limits subsequently she was put on antitubercular treatment comprising of Ethambutol, Isoniazid, Rifampicin and Pyrazinamide. One week after discharge patient followed up in O.P.D with jaundice anorexia, nausea vomiting, hepatic enlargement & tenderness^{9,10}. Hepatic enzyme elevations^{4, 6} have been seen and jaundice persists even after 3 months of modified anti T.B regimes have given. In this case all hepatotoxic drugs stopped⁵ and patient given S, H and E till hepatitis resolves that is up to 3 months then after that she was found normal hepatic enzyme level with so H E regime continued for 10 months with complete clinical recovery, clinical experience have showed that these drugs can be given safely in majority

DISCUSSION

Hepatotoxicity is an important and commonly encountered adverse effect of many anti tuberculosis drugs. R, Z, H, PAS and Ethio are all potentially hepatotoxic drugs where as E, S and other amino glycosides cycloserine (CS) and various quinolones are non – hepatotoxic³, out of first line drug Z is most hepatotoxic and R is least². A number of conditions predispose to anti T. B drugs induced Hepatotoxicity. These include age, female sex, poor nutritional status, pre-existing chronic liver disease, extensive pulmonary disease or serious type of T.B.^{1,4}

In the patients,

- 2 RHE with or without S/6 HR
- 9 RH
- 2 SHE / 10 HE
- Are appropriate and safe regimes²

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