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TREATMENT OF TUBERCULOUS SPONDYLITIS IN PATIENTS WITH A HISTORY OF VIRAL HEPATITIS

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Abstract

Tuberculous spondylitis is one of the most severe forms of extrapulmonary tuberculosis, characterized by progressive destruction of the vertebrae, spinal deformities, and the development of neurological complications. The treatment of tuberculous spondylitis in patients with a prior history of viral hepatitis represents a particular clinical challenge, since standard anti-tuberculosis therapy regimens are hepatotoxic and may lead to reactivation or decompensation of chronic liver damage.

Objective: To study the особенностей (features) of anti-tuberculosis therapy in patients with a history of viral hepatitis.

Materials and Methods

The study was conducted at the tuberculosis dispensary of the Samarkand Regional Phthisiology and Pulmonology Center. A total of 51 patients with a history of viral hepatitis (VH) were observed.

All patients underwent general clinical examination, including assessment of serum bilirubin levels and ALT/AST activity, as well as testing for hepatitis markers (HBsAg). Additional investigations included computed tomography of the spine (“Bright Speed General Electric”), chest radiography, and liver ultrasound examination.

Results

Clinically, patients mainly complained of symptoms associated with joint and spinal involvement. The severity of pain syndrome varied depending on the extent and stage of the process. In the majority of patients (21 individuals — 41%), the disease was diagnosed after the development of neurological deficits, primarily dysfunction of the limbs and pelvic organs.

All patients were prescribed standard anti-tuberculosis therapy.

The patients were divided into two groups:

1. Group I — 22 patients with abnormal biochemical parameters;
2. Group II — 29 patients with normal biochemical parameters.

In 14 patients, signs of hepatotoxic reactions developed two weeks after initiation of anti-tuberculosis drugs (ATDs).

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From the start of anti-tuberculosis therapy, all patients received prophylactic hepatoprotective treatment with Karsil (35 mg) at a dose of 1.5 mg/kg per day, along with dietary recommendations (Diet No. 5).

Regardless of the presence or absence of complaints, all patients in this group underwent biochemical monitoring every 10–14 days.

When toxic reactions developed — including jaundice of the skin and visible mucous membranes, pruritus, heaviness and/or pain in the right hypochondrium, nausea and/or vomiting, and hepatomegaly (up to 3 cm) — patients were prescribed Ursosan at 8–10 mg/kg per day, intravenous Essentiale solution infusions, 5% glucose solution drip infusion, and vitamin therapy.

In 14 patients from Group II, despite prophylactic hepatoprotective therapy, by the end of the second week, elevated ALT/AST levels and bilirubin (both direct and indirect fractions) were detected. Clinically, this manifested as jaundice, heaviness in the right hypochondrium, nausea, and hepatomegaly.

1. Dynamic follow-up showed improvement of clinical and laboratory parameters in:
2. 5 patients after 1 week of intensive hepatoprotective therapy;
3. 7 patients by the end of the second week;
4. The remaining patients by the end of 1 month.

It should be noted that in 4 patients with severe condition (intense right hypochondrial pain, nausea, vomiting, marked jaundice, total bilirubin 130–160 mmol/L), anti-tuberculosis drugs were temporarily discontinued until stabilization of clinical and laboratory parameters. The interruption lasted from 3 to 9 days.

In one patient, due to recurrent toxic reaction, after intensified detoxification therapy, the most hepatotoxic drug — pyrazinamide — was replaced with streptomycin sulfate.

Conclusions

1. During the intensive phase of tuberculosis treatment in patients with a history of viral hepatitis, adverse hepatic reactions are frequent (63%).
2. Hepatotoxic reactions most commonly occur 3–7 days after initiation of anti-tuberculosis therapy.
3. In patients with a history of viral hepatitis, prophylactic hepatoprotective agents administered alongside anti-tuberculosis therapy help reduce hepatic toxic complications.
4. Considering the hepatotoxicity of first-line anti-tuberculosis drugs, mandatory assessment of liver function is recommended before initiation of chemotherapy and 10–14 days after starting specific therapy.
5. Patients with a history of viral hepatitis should adhere to Diet No. 5 (according to Pevzner) and receive hepatoprotective agents during the intensive phase and throughout the entire treatment course to prevent liver complications.

References

1. Liu Y.M., Cheng Y.J., Li Y.L. *Antituberculosis treatment and hepatotoxicity in patients with chronic viral hepatitis* — analysis of the impact of anti-tuberculosis therapy on the development of drug-induced hepatitis in individuals with chronic viral hepatitis.

pISSN:2349-5707 Volume:13,Issue 2, February -2026 eISSN:2349-5715

2. Chou C., Veracruz N., Chitnis A.S., Wong R.J. *Risk of drug-induced liver injury in chronic hepatitis B and tuberculosis co-infection: A systematic review and meta-analysis* — systematic review of the risk of drug-induced liver injury in patients with HBV and tuberculosis co-infection.
3. Ashkin A., Alexis A., Ninneman M. *Concomitant Treatment of Tuberculosis and Hepatitis C Virus in Coinfected Patients Using Serum Drug Concentration Monitoring* — approaches to simultaneous treatment of tuberculosis and hepatitis C with drug concentration monitoring.
4. Kizilbash Q.F., Seaworth B.J. *Multi-drug resistant tuberculous spondylitis: A review of the literature* — review of treatment principles for multidrug-resistant tuberculous spondylitis.