



LIVER LESION IN PATIENT WITH PULMONARY TUBERCULOSIS TREATED WITH QUADRUPLE ANTITUBERCULOSIS THERAPY-A CASE REPORT

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Objective:

Liver lesion in patient with pulmonary tuberculosis treated with quadruple antituberculosis therapy - a case report

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ABSTRACT

Introduction: Tuberculosis is one of the most common infectious disease in the world, more common in



patients with reduced immunity, HIV, diabetes, malignant diseases or renal failure. Standard medical treatment includes 6-months treatment with isoniazid and rifampicin, including therapy with pyrazinamide and ethambutol in the first 2 months, with the exception of tuberculous meningitis when 12-month therapy is recommended.

Case report: We will present the case of a 27-year-old patient who was diagnosed with M. tuberculosis infection after COVID-19 infection. A quadruple antituberculosis therapy was initiated according to DOTS strategy. Liver lesion was shown in laboratory tests, transaminases increase ninefold, and bilirubin levels stayed normal during laboratory testings. Pharmagenomic testing was performed and lower activity of NAT2 enzymes in the liver in the metabolism of isoniazid and pyrazinamide was verified. According to that, antituberculosics were gradually introduced one by one, first isoniazid and rifampicin, then ethambutol, and then pyrazinamide, with liver test and KKS controls every 2-3 days. The patient continue the Rifampicin therapy for up to 6 months, and ethambutol and pyrazinamide therapy for up to 2 months.

Conclusion: After the introduction of antituberculosis therapy, liver lesions are common side effects. Initial liver function and regular monitoring are important for patients treated with standard therapy. Rifampicin can cause asymptomatic hyperbilirubinemia, but along with isoniazid and pyrazinamide, it can also cause hepatitis. Mild asymptomatic increase in transaminases is common, but significant hepatotoxicity occurs in only 2-5% of cases.

Key words: tuberculosis, antituberculosis therapy, liver lesion, hepatotoxicity