Drug-Induced Liver Injury Associated with Antitubercular Medications

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Many medications, both prescription and over the counter, have adverse side effects that range from mild to severe. This research paper focuses specifically on antitubercular medications and the risk of injury they pose on the liver. Tuberculosis remains a concerning and infectious bacterial disease throughout the world. Close to a quarter of the world's population is infected with tuberculosis, and over 4000 tuberculosis-induced deaths occur daily. The drug regimen for treating tuberculosis, however, has been associated with many cases of liver injury, some of which have led to discontinuation of the drugs and overall treatment failure in up to 28% of cases. This review provides an assessment of the common antibiotics used to treat tuberculosis and their mechanism of action including their mechanism of injury towards the liver. By first providing an in-depth background of tuberculosis, its concern within different demographics throughout the world, and the risk factors involved, this paper describes the adverse effects of antitubercular medications on the liver when attempting to treat tuberculosis. Studies have shown a correlation between liver injury and antitubercular medications in about 11% of patient cases, which leaves many unanswered questions and room for interventions. Tuberculosis remains a global and long-standing burden, impacting millions of people and the treatment options have become a concern due to their harmful side effects on the liver. Therefore, prioritizing further research and clinical trials in addition to patient education, screening and monitoring can help reduce the risk of liver injury and promote successful treatment outcomes.