

TOPIC HIGHLIGHT

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Alcohol and liver

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FROM THE EDITOR

Liver is a primary site of ethanol metabolism, which makes this organ susceptible to alcohol-induced damage. Alcoholic liver disease (ALD) has many manifestations and complicated pathogenesis. In this Topic Highlight, we included the key reviews that characterize new findings about the mechanisms of ALD development and might be of strong interest for clinicians and researchers involved in liver alcohol studies.

Being the primary site of alcohol metabolism, liver is severely influenced by alcohol drinking. The combination of toxic effects of alcohol and numerous predisposing factors usually form the basis for ALD development. This disease has many manifestations, which are triggered by multiple pathogenic factors, causing progression in liver damage from steatosis to liver cirrhosis and hepatocarcinoma. The progression between various stages of ALD is driven by so-called "second hits", which trigger ALD development. In 2007, in *World Journal of Gastroenterology*, we published Topic Highlight: Alcohol liver injury: Pathological feature and models. There, we reviewed the role of alcohol in changes of iron metabolism, proteasome function, immune response, signaling mechanisms, transmethylation reactions, as well as apoptosis and mitochondrial damage. Current Topic Highlight is a logical continuation of the previous one, which further expands our understanding of the mechanisms of ALD progression and complexity of ALD pathogenesis, thereby providing important information for hepatologists about the modern directions in alcohol research.

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ADDITIONAL FILE

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