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Role of macrophages in pathomorphogenesis of alcoholic liver disease

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Abstract

Alcoholic liver disease combines various structural and functional impairments of liver caused by excessive alcohol consumption. Alcohol, as a direct hepatotoxic agent, is metabolized in the liver and affects both resident cells and their microenvironment. These changes are reflected in the resulting imbalance of pro- and anti-inflammatory mediators synthesized by the liver macrophages. To date, it is known about the polarization and phenotypic diversity of this cell population, and about macrophages and monocytes involvement in the development of alcoholic hepatitis. These facts allow us to consider macrophages as potential therapeutic targets. However, the available data do not fully disclose the mechanisms of inter- and intradifferon interactions in the human body. The review discusses the results of current studies on the involvement of liver macrophages in the pathomorphogenesis of alcoholic liver disease and the potential for their use in the treatment of this disease.

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Keywords

Alcoholic liver disease, Kupffer cell, Liver cirrhosis, Macrophage, Monocyte

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