

Hepatotoxicity: Toxic Effects on the Liver

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The liver is one of the major and principal internal organs of the human body. It is the main organ for the metabolism and detoxification of drugs and environment chemicals. It is the main organ where exogenous chemicals are metabolized and eventually excreted. It is often the most vulnerable target for toxicity from orally ingested chemicals according Ira. S. Richards: Principles and Practice of toxicology in public health. This special organ for metabolism and detoxification of drugs and some other bimolecular is made up of cells hepatocytes, endothelial cells, Kupffer cells and Stellate to cells. The hepatocytes directly receive chemicals from the venous return of the digestive tract, including toxicants and drugs. The role of the liver in drug metabolism and detoxification makes it to be highly susceptible to be exposed to different chemicals that can alter its functions which can result in liver dysfunction, cell injury [necrosis, steatosis, cholestatis, cirrhosis, vascular injury and Neoplasia. Despite the fact that the liver has the amazing tendency or ability to regenerate itself through mitotic division, this mitotic division can be inhibited or stopped as a result of toxins or infections causing hepatic damage and death. Due to blood flows from the stomach and intestine, the liver is the first internal organ to encounter a number of ingested toxicants. The abuse use of drugs inducing liver injury is a major challenge for the pharmaceutical industries and physicians. The aim of this study is to discuss briefly 2 agents or toxic substances with high risk of causing hepatotoxicity. The agents in this study were Alcohol and Acetaminophens. Articles were gathered from different textbooks, health journals, and website base on the topic at hand (Hepatotoxicity). Public awareness, health programs and other health activities would be of great help to inform the entire public the danger heavy consumption of alcohol and acetaminophens could impose to their liver.

Key words: Metabolism, detoxification, exogenous chemicals, hepatocytes, necrosis, steatosis, cholestatis, cirrhosis, vascular injury and Neoplasia, mitotic division, alcohol and acetaminophens.