-Anovel therapeutic drug (copper nicotinic acid complex) for non-alcoholic fatty liver

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Abstract:

Fatty liver is the accumulation of fat in liver cell. Which leads to disruption of the normal liver structure. A non-alcoholic fatty liver rat model received copper (Cu)(I)-nicotinate complex[CuCl(HNA)2] for 4 weeks. clinical signs and histopathological examinations showed obvious improvements in rats that received Cu complex who were continuously on (HCFF) diet than those returned to standard diet without Cu complex .The improvement was matched in total lipids in sera and hepatic tissue, with disappearance of fat droplets from liver sections. Furthermore, the gain in body weight and the corresponding decrease in liver weight, decreased liver transaminases and alkaline phosphatase were prominent. The oxidative stress markers such as nitric oxide, lipid peroxides, glutathione and superoxide dismutase were obviously changed to healthy normal levels. conclusively the Cu complex may serve as a novel chemical restoring agent in fatty degenerated liver cells and for renewal of their structure and functions. However, clinical trials are required for more evaluation of the Cu complexes in humans.

Published In:

EPS Montreal International Conference on Metabolic Disease , ,