Hepatoprotective Assessment of L-Ascorbate 1-(2-Hydroxyethyl)-4,6-Dimethyl-1, 2-Dihydropyrimidine-2-On Exposure to Carbon Tetrachloride

Authors: Nail Nazarov, Alexandra Vyshtakalyuk, Vyacheslav Semenov, Irina Galyametdinova, Vladimir Zobov, Vladimir Reznik Abstract: Among hepatic pyrimidine used as a means of stimulating protein synthesis and recovery of liver cells in her damaged toxic and infectious etiology. When an experimental toxic hepatitis hepatoprotective activity detected some pyrimidine derivatives. There are literature data on oksimetiluratcila hepatoprotective effect. For analogs of pyrimidine nucleobases - drugs Methyluracilum pentoxy and hepatoprotective effect of weakly expressed. According to the American scientists broad spectrum of biological activity, including hepatoprotective properties, have a 2,4-dioxo-5-arilidenimino uracils. Influenced Xymedon medicinal preparation (1- (beta-hydroxyethyl) -4,6-dimethyl-1,2-dihydro-2-oksopirimidin) developed as a means of stimulating the regeneration of tissue revealed increased activity of microsomal oxidases human liver. In studies on the model of toxic liver damage in rats have shown hepatoprotective effect xymedon and stimulating its impact on the recovery of the liver tissue. Hepatoprotective properties of the new compound in the series of pyrimidine derivatives L-ascorbate 1-(2-hydroxyethyl)-4,6-dimethyl-1,2-dihydropirimidine-2-one synthesized on the basis Xymedon preparation were firstly investigated on rats under the carbon tetrachloride action. It was shown the differences of biochemical parameters from the reference value and severity of structural-morphological liver violations decreased in comparison with control group under the influence of the compound injected before exposure carbon tetrachloride. Hepatoprotective properties of the investigated compound were more pronounced in comparison with Xymedon.

Keywords: hepatoprotectors, pyrimidine derivatives, toxic liver damage, xymedon

Conference Title: ICPDDDT 2017: International Conference on Pharmaceutical Drug Design, Development and Technology

Conference Location : Cape Town, South Africa **Conference Dates :** November 02-03, 2017