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P70. HISTOLOGICAL EFFECTS OF (4S)-2-(4-HYDROXY-3-METHOXYPHENYL) THIAZOLIDINE-4-CARBOXYLIC ACID ON ZEBRAFISH *(Danio rerio)* LIVER TISSUE

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Examination the histopathological effects of (4s)-2-(4-hydroxy-3-methoxyphenyl) thiazolidine-4-carboxylic acid on liver tissue of zebrafish were aimed.

(4S)-2-(4-hydroxy-3-methoxyphenyl) thiazolidine-4-carboxylic acid is new synthesized substance which obtained from cysteine and valine. Because of thiazolidine derivates have important biological responses scientist work intensively on these compounds recent years. It is obvious that thiazolidine contained compounds will be used in future in the pharmaceutical industry to treat important diseases.

After one-week adaptation period zebrafish divided into four group (n=10) as one control and 3 experimental groups (0,2 mM, 0,4 mM, 0,6 mM). For investigating the effects of thiazolidine, liver tissues were dissected after 5 day of the exposure. Tissues were fixed with 10% neutral buffered formalin and dehydration were carried out in an ascending series of ethanol. After tissues were cleared in xylene, embedded in paraffin wax and cut into 5 µm sections on a microtome. The sections were stained with hematoxylin (H&E) and PAS. Results were evaluated with light microscope.

In control group normal liver histology was monitored. Parenchyma cells, hepatocytes and their cytoplasm were observed clearly. Sinusiods and nuclei were easily monitored. In the 0,2 mM exposure group, degeneration, contraction at vacuoles in hepatocyte cytoplasm, hypertrophy. Degeneration was detected at hepatocyte cells. In 0,4 mM exposure group, some kupffer cells were observed in elliptical form. Degeneration and vacuolization were observed on kupffer cells. In 0,6 mM exposure group, vacuolization at vacuoles in hepatocyte cytoplasm were monitored. Vacuolization and degeneration were also observed hepatocyte cells. Vascular and sinusoidal degeneration and steatozis were detected as well. As a result, with this study, it is proved that (4s)-2-(4-hydroxy-3-methoxyphenyl) thiazolidine-4-carboxylic acid cause deterioration in fish liver tissues.

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