HEPATOPROTECTIVE POTENTIAL OF *Pterygoplichthys disjunctivus* PURE LIVER OIL EXTRACT ON ACETAMINOPHEN-INDUCED ALBINO MICE

An Undergraduate Research
Presented to
The Faculty of the Biological Sciences Department
College of Science
De La Salle University – Dasmariñas

In Partial Fulfillment
Of the Requirements for the Degree of
Bachelor of Science in Biology
(Major in Human Biology)

Baxeley Joy L. Navidad Amor P. Reyes

March 2009

ABSTRACT

The aim of this study is to investigate the hepatoprotective potential of *Pterygoplichthys disjunctivus* pure liver oil extract on acetaminophen-induced liver damage in albino mice. This experimental study included histotechniques in determining the extent of liver damage induced by high dosage of acetaminophen on the test animals. The effectiveness of the extract was determined through histopathological observation and analysis of the liver exposed to Multiple-Dose treatment using photomicroscopy.

In Multiple-Dose treatment, all of the albino mice belonging to T_0 survived all throughout the duration of the 72-hour study. In T_1 , 30% mortality of albino mice was observed. In T_2 , all of the albino mice also survived within 72 hours of observation.

The livers obtained from T_0 and T_2 exhibited no damage. They both showed normal liver architecture. On the other hand, livers from T_1 , showed histopathological damage where necrosis, pyknosis, and vascular lesions were observed.

Based on the results of this study, the researchers concluded that acetaminophen, when taken in high dosage, cause physical and behavioral effects on albino mice such as weakness, less activity, dizziness, and nausea. Since at T_2 , high incidence of survival rate of albino mice occurred and their livers exhibited normal architecture similar with T_0 , it could also be confirmed that *Pterygoplichthys disjunctivus* pure liver oil extract has effectively offered hepatoprotective potential on acetaminophen-induced hepatotoxicity. Detailed studies on the exact mode of action and clinical assessment remain to be explored.

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