

ABSTRACT

This study aimed to test the effectiveness of guava leaf extract in alcohol-induced liver damage guinea pigs. Guava was utilized in this study because it has several proven health values. It has a chemical component, quercetin, which is a powerful anti-oxidant and is responsible for the potential prophylactic effect of the leaf extract. Alcohol, on the other hand, is one of the main causes of liver damage because when the rate of alcohol consumed exceeds the liver's detoxification rate the liver will not be able to metabolize that much amount. 10% ethanol was administered to induce liver damage in 25 male guinea pigs. The test organisms were divided into five groups, each having different treatments. The first group was the control group (T0) which was given normal saline solution only; this served as the baseline data. The second group, hepatotoxic group (T1), was only given 10% ethanol and normal saline solution. T2, T3, and T4 were the treatment groups, which were given 50%, 75%, and 100% guava leaf extract and 10% ethanol. The liver enzymes Alanine Aminotransferase, Aspartate Aminotransferase, and Alkaline Phosphatase were used as parameters in measuring the degree in the liver cells upon its elevation. According to the results gathered guava leaf extract has a prophylactic effect against alcohol liver damage because it was able to lower and maintain the serum levels of the test organisms to its normal values. Among the three treatments, 75% concentration was the most effective in lowering the serum levels.