A comparison of parameters used to assess liver damage in sheep treated with carbon tetrachloride

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Abstract

Changes in serum enzyme levels, liver histology and liver function tests have been correlated to determine the usefulness of these tests in assessing liver status. The effects of carbon tetrachloride administration on these parameters has been determined in a group of 20 sheep. Normal levels, elevated levels after injury and the effect of elapsed time after injury are reported for serum glutamic dehydrogenase, sorbitol dehydrogenase, glutamic-oxaloacetic transaminase, glutamic-pyruvic transaminase, lactate dehydrogenase, fructose-1-phosphate adlolase, alkaline phosphatase, cholesterol and proteins. Variation in the time of elevation of enzyme activities may be useful in determining the elapsed time between acute injury and serum sampling. In comparison to sheep fed an adequate diet, a diet with a restricted protein intake was associated with increased severity of histological lesions and decreased liver function