

## Abstract

Contamination with sarcocystis is one of the most common common protozoan infections between humans and livestock which is caused by different species of sarcosystis. Due to the importance of this parasite, in this study, the rate of infection with macroscopic and microscopic sarcotic cysts in The cow was slaughtered at a soldier slaughterhouse. Sarcosystis is one of the most common human and lung infectious parasites that has a worldwide spread. The high rate of contamination with cystic microscopic crocosts in cows has shown a high rate of contamination in livestock.

For the purpose of this study, with the coordination of veterinary system in the city of Sarbaz in summer 2016, 25 blood samples were obtained from the heart of cows with macroscopic sarcosystic cysts and 25 blood samples from the heart of cows without macroscopic crocostic cysts. In order to study the microscopic contamination of sarcocystis in these tissues of the muscle of the heart Esophageal muscle and maxillary muscle from 25 crests of macroscopic sarcosystic cysts and 25 crests without macroscopic sarcocystis cysts were collected from slaughtered slaughterhouses of the former kimia slaughterhouse of Sarbaz. After the above steps, the serum of isolated blood markers LDH, AST, CP and troponin Using ELISA reader and Spectrophotometric method. ANOVA statistical test showed that LDL-AST was significantly higher in Crocus sarcoidosis than in others, but the level of CPK was not related to the severity of infection, *Sarcocystis cerevisiae*.

The results of this study showed that increased infections in the cerebellar, cerebrospinal fluid and cerebellar muscle increased the level of lactate dehydrogenase aspartate aminotransferase enzyme than keratin phosphokinase in livestock samples.

**Keywords:** Sarcocytosis, Cow, Heart, Biomarker Enzyme Level

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- Lactate dehydrogenase (LDH or LD), an enzyme found in oxidoreductase from plants, animals and prokaryotes.
  - AST stands for Aspartate aminotransferase (aspartate aminotransferase). AST is an enzyme in cells throughout the body, but mostly found in the heart and liver and to a lesser extent in the kidneys and muscle. In healthy people, AST levels are low in the blood.
  - CPK is a cellular enzyme with high levels of skeletal, myocardial and cerebral muscle, and damage to any of these tissues leads to an increase in serum CPK levels. There are three isoforms that indicate the origin of the tissue of the CPK: MM (skeletal muscle), MB (myocardium), and (BB brain)



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