Acute phase proteins are potent markers for early detection of diarrhea in white New Zealand rabbits (Oryctolagus cuniculus) in Egypt: A biochemical study

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The study tended to find biochemical and molecular markers for early detection of diarrhea in rabbits. Sixty male White New Zealand rabbits of average weight; 450-650 grams, and age; 6-8 weeks were included in this study; rabbits were divided into two groups; group A (N=30); control; did not subject to any infection and group B (N=30); was infected with single oral dose of Escherichia coli strain O26. Six rabbits from each group were sacrificed after 1, 3, 7, 11 and 15 days respectively. Blood samples were used for measurement of haptoglobin (Hp)&C reactive protein (CRP) levels and ceruloplasmin (Cp) activity in serum. Liver samples were used to determine the mRNA expression level of Hp gene. The results revealed a significant increase in Hp levels in all infected rabbits, Cp activity and CRP level tended to be elevated after the 3rd day of infection. Hp gene expression level was elevated in infected groups. In conclusion; acute phase proteins (APPs) could be potent markers for the early detection of infectious diarrhea in rabbits.

Biography

Aaser Abdelazim has a bachelor’s degree from the Zagazig University and a master’s degree in Medical Biochemistry and molecular biology from Zagazig University after that he gained a visiting scholarship for collecting data for his PhD in faculty of Medicine and dentistry sciences, institute of nephrology, Niigata University, Niigata, Japan, after that he returned to Egypt to gained his PhD degree in molecular biology and medical clinical biochemistry from Zagazig University. He taught Biochemistry and molecular biology for several years at a Zagazig University and Port Said University, Egypt. Now he is working as assistant professor at department of medical laboratories, faculty of applied medical sciences, King Khalid University, KSA to teach clinical biochemistry and physiology. He has published many papers in international journals with impact factor in the field of biochemistry and molecular biology. Also he joined many research projects and he was a member of biotechnology research team at Zagazig University, Zagazig city, Egypt.

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