Mona S Mahmoud, J Vet Sci Med Diagn 2016, 5:5(Suppl)
http://dx.doi.org/10.4172/2325-9590.C1.008

5th Animal Health and Veterinary Medicine Congress

The immunization of sheep against *Babesia ovis* with purified fractions of parasitized erythrocytes

Mona S Mahmoud
National Research Centre, Egypt

The present study was undertaken in an effort to furnish information and materials for investigating control of babesiosis in sheep. Sonicated erythrocytes infected with *Babesia ovis* Egyptian strain was subjected to ion exchange chromatography. The proteins were fractionated into two purified fractions (unbound and bound). Sodium dodecyl sulphate poly-acrylamide gel electrophoresis (SDS-PAGE) fractionation of the crude sonicated antigen and the two purified fractions showed obvious qualitative and quantitative differences. The two purified fractions were used as immunogens for two groups of sheep using Freund's adjuvants in two successive doses. The two immunized groups plus a control one were challenged with 2.5 X 10^5 cryopreserved infected erythrocytes with a homologous strain of Babesia ovis. Blood samples were collected for assessment of packed cell volume and parasitaemia percentage. The indirect fluorescent and immunoblotting techniques were used for evaluation of immunization process. All animals in immunized groups were protected against infection, when compared with those in control group.

Biography

Mona S Mahmoud has been appointed as the Professor of Parasitology and Head of the Veterinary Research Division, National Research Center, Egypt. Her areas of interest include working on developing techniques for diagnosis and control of parasitic diseases. She has graduated from Veterinary College, Cairo University in 1984 and obtained her Master's and PhD in Parasitology in 1992 and 1998, respectively. She is an internationally experienced Researcher. She has undertaken duty travel to four countries in, Asia, Europe and United States. She is a Principal Scientist in cooperative agreement between NRC and CRP-Santé, Luxemburg (2013-2016). She has published over 40 papers in Biological Science journals, and has written 2 reviews.

Notes: