



## Clinicopathological changes in equine herpes virus type 1 (EHV-1) infection in Arabian foals

Fararh K.M.<sup>1</sup>, Kandil O.M.<sup>2</sup>, Abd-Allah O.A.<sup>3</sup> and Thabet N.F.<sup>4\*</sup>

<sup>1</sup>Department of Clinical Pathology, Faculty of Veterinary Medicine, Banha University, Egypt

<sup>2</sup>Department of Animal Reproduction & Artificial Insemination, Veterinary Research, Egypt. Division, National Research Center, Egypt

<sup>3</sup>Department of Clinical Pathology, Faculty of Veterinary Medicine, Sues Canal University, Egypt

<sup>4</sup>Department of Veterinary Care, El-Zahra Stud for Egyptian Arabian Horses Breeding, Egypt

**Abstract:** Evaluate clinicopathological changes in Arabian foals infected by EHV-1 are important for equine clinics to help in supportive clinical and earlier detection of complication. Blood sample were collected from sixty foals for haematological and biochemical determination. Growing foals (n = 60): divided into apparently healthy animals (n = 17), vaccinated animals (n = 8) which vaccinated with Equine Herpes Virus type 1, and EHV-1 diseased animals (n = 35) were suffered from respiratory disease disorders. Recovered animals (n = 35) were the same diseased animals but after disappear of respiratory symptoms. The present work was reported mild immune mediated hemolytic anemia in diseased and recovered (three weeks after) foals groups. WBCs differential showed neutropenia, lymphocytosis, monocytosis and eosinopenia in diseased and recovered (three weeks after) foals groups while vaccinated animal showed lymphocytosis. Hypoproteinemia was found in diseased, recovered (three weeks after) and vaccinated foals groups. Hypoalbuminemia and hypoglobulinemia were observed in diseased foals group. GOT and GGT revealed significant increase in vaccinated foals group. In conclusion, present work reported clinicopathological changes associated with of EHV-1 in Arabian foals.

**Keywords:** EHV-1, haematological, biochemical determination, Arabian foals.