

## Abstract

Hepatitis E virus (HEV) is one of common causes of viral hepatitis in human. In addition to human evidence of HEV infection was also documented in other animal species. There are reports of this virus infection in human by the consumption of animal food productions, caused Hepatitis E be an important zoonosis infection between human and animal. And recently genotypes named HEV-7 and HEV8 have been identified in Dromedary and Bactrian camels, respectively that zoonotic potential of HEV-7 is confirmed. Due to the high camel population in Sistan and Baluchestan province and increasing public interest in using camel meat and dairy products, this study was designed for the first time in country to investigate the presence of virus in camels population. For this purpose, the cities with the largest population of camels were selected and blood and liver samples were taken randomly with sterile conditions and ethics. After extracting RNA from the samples using commercial kits, by Nested PCR method using specific primers, the presence of hepatitis E virus in samples was evaluated. The results of present study show that totally 56.6 % of blood and liver samples (n=30) were infected with hepatitis E which in liver samples was higher than blood samples (P= 0.062). In addition, the results of statistical analysis show that the infection rate in camels under 2 years is significantly (P < 0.001). higher than other ages; the results also show that the rate of contamination in camels in Mirjaveh city is higher than other cities of the province (P < 0.001). The results of this study show that hepatitis E virus infection exists in camels of Sistan and Baluchestan province and the concentration of infection is in camels of border regions and imported livestock which requires determination and care.

**Keywords:** Hepatitis E, Camel, Nested PCR, Sistan and Baluchestan



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**The Thesis Submitted for the Degree of Doctor of Veterinary Medicine**

**(DVM)**

**Title:**

**Investigation of hepatitis E virus infection in camels by Nested PCR  
method**

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**September 2019**