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Investigation of Norovirus Genogroups (GI, GII and GIV) in Stool of Pet Dogs with Diarrhea

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Abstract : Norovirus (NoV) infection is effective and contagious in humans and many animals such as calves, pigs, dogs, cats, monkeys. There is not enough evidence about the zoonotic transmission of NoV between humans and animals. However, the fact that contamination of foods and environment by animal/human waste happens in indirect way leads to consideration of the agent as a zoonotic character. In our study, we aim to search the presence of NoV infection, which is a major public health problem, in possessed dogs showing diarrhea symptoms, to detect its genotype and to study nutrition and life conditions. We searched the existence of human NoV GI, GII and GIV in the stool of 128 pet dogs in Burdur Province with diarrhoea in various sex, age and breed by using Real-Time PCR method. Human NoV GII was found in only 5 of the 128 dog stool samples (3.91%). In the study, it was determined that the owners of the dogs with NoV GII are middle aged or elderly people most of whom are male and that there were no children in their houses. As these dogs are treated like the owner's child, it is assumed that they could be transmitted with NoV GII as a result of close interaction with their owner.

Keywords : dog, human, norovirus, Real-Time PCR, stool
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