Determination of Some Etiologic Agents in Calves with Diarrhea

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Abstract : The aim of this study was to determination of role infection in neonatal calves in Central Anatolian, Turkey. A total 300 fecal samples were collected from diarrheic neonatal calves, aged between 0-90 days from Konya, Karaman, and Aksaray from January to April 2014. Fecal specimens from calves with clinically diarrheic symptoms were examined for the presence of Bovine Coronavirus, Bovine Rotavirus, Cryptosporidium sp., and E. coli by commercially available capture direct enzyme linked immunosorbent assay (ELISA) kit and Modified Ziehl Neelsen method (MZN). Calves were grouped according to their age as follows: 1-14, 15-29, and 30-90 days. Cryptosporidium sp. infection was detected in 52.8%, 58.8%, and 39.2% by ELISA and 33.9%, 47%, 26.7% by MZN in the respective age groups. The seroprevalence of Rotavirus (12.5 %, 40 %, 12.5 %), Coronavirus (2.5%, 0%, 3.5%) and E. coli (5%, 4.7%, 8.9%) infections were determined according to the age groups respectively. Cryptosporidium sp. was the most detected enteropathogen (52 %) of calves and coronavirus was the least detected (2 %). The detection rate of the mixed enfection was 12.3%. In conclusion, it must be evaluated by mix infections in calves with diarrhea. These results will provide an important contribution against the factors that cause diarrhea

Keywords: cryptosporidium sp., bovine coronavirus, bovine rotavirus, E.coli, calve, ELISA

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