

Abstract:

peste des petits (PPR) is a public and contagious disease of sheep and goat. The disease (PPRV) is a Morbilli virus of the Paramyxoviridae family. Considering the importance of this disease in Sistan region, its economic disadvantages, the high consumption of animal meat in the traditional way of slaughter in this area and lack of adequate supervision on animal health, the present study was conducted with the aim of investigating the histopathology of small plague ruminants (PPR) In sheep and goat population in Sistan region. In this study, 30 specimens of sheep and goats suspected of PPR disease in Sistan region were collected completely randomly. The textured samples 1×1×0.5 cm are placed in 10% buffer formalin and the formalin is used for fixation after 24 hours. The specimens are then placed in an automatic device. The most commonly used lambs are stained with haematoxylin-eosin and placed on them, and the slides are prepared by optical microscopes with magnets. Are studied differently. After histopathologic stages, the results of clinical symptoms and pathological examinations and tissue lesions severity were analyzed using SPSS software and Kappa test. Thirty seven sheep were taken from among suspected cases of small ruminant plague and microscopic lesions were seen in 9 specimens. Two specimens with erosive necrotic lesions on the tongue and the remaining lesions in the tonsils, in 3 samples formed Syncytial cell and in 1 an example of the wind insufflation was seen in the cytoplasm. In 4 samples, the accumulation of monoclonal cells and 1 aggregation of mononuclear cells were observed. Of the 30 samples, 9 samples had microscopic lesions. The incidence of infection in sheep and goats was % 33.25 and % 38/88, respectively. A significant association was found between the studied genus groups and lesions, such as multi-nucleus cell accumulation, and establishment Syncytial cell ($P < 0.05$). However, there was not a significant correlation between the studied genus groups and lesions such as accumulation of single nuclei and accumulation of inflammatory cells, inclusion body in cytoplasm ($P > 0.05$). The percentage of infection in ruminant's less than two years of age, over two years was 35.18% and 22.8%, respectively. There was not a significant relationship between the studied age groups and lesions such as multi-nucleus cellular accumulation, Syncytial cell and inclusion body in the cytoplasm ($P > 0.05$), but a significant relationship was found between the age groups studied and the single-nucleus inflammatory cells ($P < 0.05$). The percentage of infection in female genus was 49.98% and 12.5%, respectively, and a significant association was found between the sexuality studied and lesions such as multi-nucleus cell accumulation, Syncytial cell and the occurrence of inclusion body in the cytoplasm, but No significant correlation was found between the sexuality groups and the single-nucleus inflammatory cells ($P > 0.05$).

Keywords: Histopathology, Sheep, Goat, PPR



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**Histopathological examination of peste des petits ruminants (PPR)
of sheep and goats population in Sistan**

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