



Isolation and identification of some respiratory pathogens in perished kids in Avingen Agro Ind. Development Co.

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ABSTRACT

Background and Aim: Pneumonia is one of the most important diseases that causes a drop in production. Bacterial infectious agents are one of the most important causes of this complication.

Materials and Methods: The present study was conducted in order to isolate and identify some respiratory pathogens in dead goats. For this purpose, with numerous referrals to the company during the winter and spring (breeding season), sterile swabs were sampled from the nasal discharge of suspected pneumonia (according to the veterinarian) Alpine and Senn race for bacteriological and virological examination. Two methods of culture and RT-PCR assay were performed.

Results: Among bacteria isolated by culture method, the prevalence of *Escherichiacoli* was 21.15%, *Staphylococcusepidermidis* 15.58%, *Klebsiellapneumoniae* 12.19%, *Actinomycespyogenes* 7.31%, *Pasteurellamultocida* 6.9%, *Staphylococcus aureus* 4.87%, and *Pseudomonasaeruginosa* 2.43% Was. Also, the prevalence of parainfluenza type 3 and respiratory syncytial virus was reported 43% and 28%, respectively, using molecular methods. In the present study, the most bacteria isolated from pneumonia cases was *E. coli*.

Conclusion: It seems that due to the higher abundance of this bacterium and its presence, especially in the samples, it has a higher contribution in causing pneumonia. Although other bacteria that are not very important in causing pneumonia were isolated in relatively significant numbers in culture cases, but the specific organisms causing pneumonia such as *P. haemolytica* were not isolated from any case, *P. multocida* was isolated in 5 cases. This bacterium plays a role in causing septicemia in lambs, goats and calves. Today, the role of viral factors in causing pneumonia in livestock is much more important than before. In this study, these factors were diagnosed with a relatively high prevalence.

Keywords: Pneumonia, Kids, Avingen Agro Ind. Development Co., Para-Influenza type 3, Respiratory Syncytial Virus

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