

Bacteriological and Pathological Study on Dromedary Camels Pneumonic Lungs

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ABSTRACT

Respiratory diseases of camel especially pneumonia continue to be a major problem commonly encountered in camel. In the present study, 45 pneumonic lungs from one humped camels with different ages and sex were collected from Tambool abattoir in Sudan for isolation, identification of bacteria and histopathological study .The isolates were then fully confirmed by full biochemical identification using conventional and automated techniques which were API kits and full automated system Vitek2 compact. 80 bacterial isolates were recovered, they were: 15 (18.75%) *S. aureus*, 7 (8.75%) *S. epidermidis*, 5 (6.25%) *S. warrner*, 1 (1.25%) *S. heamoliticus*, 6(7.5%) *Str. pneumoniae*, 5(6.25%) *Str. pyogenes*, 1(1.25%) *Str. suis*, 11(13.75%) *E. coli*, 3(3.75%) *Coryne ulcerans*, 1(1.25%) *C. amycolatum*, 1(1.25%) *Actinomyces naeslandii*, *Actinomyces pyogenes*, 9 (11.25%) *K. pneumoniae*, 7(8.75%) *Ps. aeruginosa*, 2(2.5%) *Aeromonas salmonicida*, 1(1.25%) *Burkholderia cepacia*, 2(2.5%) *Bacillus spp* and 1(1,25%) *Flacklamia homonis*. The histopathological changes observed were emphysema with an incidence of 25 (55.6%), atelectasis in 24 (53.3%), heamorrhge in 20 (44.4%), odema in 19 (42.2%) , inflammatory changes represented by fibrinous pneumonia in 25 (55.6%), Purulent bronchopneumonia in 13 (28.9%),spirasion pneumonia in 10 (22.2%), interstitial pneumonia 9 (20%) and abccesses in 4 (8.9%) and Tumors in 3 (6.7%). Pneumonia in camel is complex multifactorial disease in which bacterial, viral, mycoplasma and fungal infections combine with other predisposing factors such as rearing systems, stress factors, climatic changes, and unhygienic conditions. Identification of the pneumonic pathogens in the present work cleared that *Staph. aureus*, was the most pneumonic bacteria isolated from lung tissue at rate of 18.75%.

Keywords: *Camel, pneumonia, bacteriological, pathological*