ULTRASONOGRAPHIC FINDINGS IN CAMEL CALVES (Camelus dromedarius) WITH THORACIC AFFECTIONS

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ABSTRACT

This study was carried out to obtain the ultrasonographic findings of thoracic affections in camel calves. Twenty-one diseased calves and 5 healthy controls were examined. Diseased animals had clinical signs, i.e. anorexia, difficult respiration, cough and progressive weight loss. In controls, the different layers of the thoracic wall appeared as narrow bands of variable echogenicity. Medial to the thoracic wall was an echogenic line that represented the costal and pulmonary pleurae. Reverberation artifacts appeared as lines of variable echogenicity that ran parallel to the pulmonary surface medial to the pleura. The pulmonary parenchyma was not visualised because of its air content. Camel calves were diagnosed drenching pneumonia (n=6), lung abscessation (n=4), lung idiopathic consolidation (n=8) and fibrinous pleuropneumonia (n=3). In calves with drenching pneumonia, thoracic ultrasonography showed two areas of consolidation in the apical lung lobes with sub-pleural hyperechoic fluid. In lung abscessations and idiopathic consolidations have exactly similar findings. Ultrasonography of the left lung detected numerous comettail artifacts in the form of bright, closely situated echo bands starting at the lung surface and running perpendicular to the pleura in the lung tissue, a picture of pulmonary emphysema. In the camel calves with pleuropneumonia, thoracic ultrasonography revealed anechoic fluid with fibrin net in the right and left pleurae with consolidation of the cranio-ventral lung lobes. In conclusion, ultrasonography of the lungs and pleura is a useful supplement to the existing methods of examination of the thorax of camel calves and can easily be translated in the field.

Keywords: Camels, thoracic, affections ultrasonography