ULTRASONOGRAPHY OF THE THORAX IN HEALTHY AND DISEASED CAMELS (Camelus dromedarius) - AN OVERVIEW

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ABSTRACT

In camels (Camelus dromedarius), pulmonary diseases are common. However, heart diseases are mostly diagnosed at slaughterhouses or incidentally discovered at postmortem examination. Of the most important pulmonary disorders are atelectasis, bronchiectasis, pneumoconiosis, pneumonia, hydatidosis, pleuritis, emphysema, pneumothorax, hydrothorax, haemothorax, empyema and pulmonary tumours. In camels, heart diseases include pericarditis, vegetative valvular endocarditis, hypertrophic cardiomyopathy, necrotic myocarditis and congenital defects including septal defects, patent ductus arteriosus, transposition of the aorta and pulmonary artery, persistent aortic trunk, and persistent right aortic arch and sarcocystosis. Thoracic ultrasonography is applicable in camel medicine and provides valuable diagnostic information on various cardiopulmonary affections. Echocardiography has also been carried out showing the normal cardiac chamber appearance and quantitative dimensions in adult dromedary camels. The procedure supplements the clinical and laboratory examinations by providing additional information on thoracic affections for diagnosis antemortem. By thoracic ultrasonography, the veterinarian can scan different layers of the thoracic wall, pulmonary parenchyma, pleura, and obtain the measurements for the dorsal and the ventral lung borders and the resulting dorsoventral dimensions of the lungs. It is also possible to obtain good-quality echocardiograms in camels as well as normal cardiac dimensions. Of the thoracic disorders evaluated by ultrasonography are cardiac muscle dystrophy, pneumonia, pulmonary abscessation and emphysema, pleural effusion, pleuritis and pleuropneumonia. This review article describes the results of thoracic ultrasonography in healthy camels as well as in camels with some thoracic disorders.

Key words: Camels, dromedary, echocardiogram, imaging, thorax, ultrasonography