



ORAL PRESENTATION ABSTRACT

2.6. "Design of a Digital Resource Based on Plastinated Specimens for the Learning of Dilated Cardiomyopathy in Dogs". "Diseño de un Recurso Digital Basado en Especímenes Plastinados para el Aprendizaje de la Miocardiopatía Dilatada en Perros".

Inés Laguna García, Octavio López Albors, Rafael Latorre Reviriego.

Department of Anatomy and Comparative Pathology, Veterinary Faculty, University of Murcia, 30100, Murcia, Spain.

Introduction: From the eyes of a veterinary student, it is difficult to achieve the necessary skills to perform an ultrasound exploration in patients, which is partially caused by the difficulty of identifying the anatomical structures seen on the ultrasound image because there is evident neglect of accurate anatomical knowledge in the students of the last courses of the degree. We consider that by combining plastinated resources with diverse digital tools it is possible to favor the comprehension of the ultrasound images, while recalling the anatomical knowledge supporting them. This assumption has been tested in this work, aiming our focus to a common pathology in dogs, the dilated cardiomyopathy. **Material and Method:** Two silicone plastinated hearts were used. One came from a healthy dog and another from a dog suffering from dilated cardiomyopathy. Several digital programs were used to animate images obtained from plastinated specimens which, together with ultrasound images, were incorporated in a video tutorial. After having manipulated the plastinated specimens and visualized the tutorial, a satisfaction survey was distributed among the students of the last year. **Results:** The learning resource was evaluated by 30 students, who agreed it was clear, didactic, and useful for boosting the required anatomy in the ultrasound images of the dilated cardiomyopathy. **Discussion:** As previously was demonstrated by Gomez et al., 2011, this study promotes the use of plastinated heart slices to better understand ultrasound imaging of the heart. Furthermore, digital objects can be used to create animated images of high learning potential. **Conclusions:** The combination of plastinated specimens with diverse digital tools demonstrates that it is possible to refresh the anatomical knowledge, in favor of the comprehension of the echocardiographic images to diagnose the dilated cardiomyopathy in dogs, by last year degree students.

References:

Gomez et al., 2011. Veterinary Radiology & Ultrasound, 53(2), 197-203.