COMPUTED TOMOGRAPHY: A USEFUL DIAGNOSTIC IMAGING TECHNIQUE BEFORE NECROPSY PROTOCOL

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Abstract: Diagnostic imaging techniques are advantageous methods for helping diagnose without altering the animal's current state (Lugo-Fagundo et al., 2021). In particular, computed tomography allows us to observe the different tissues with a different grayscale. These will be related to the ability of the tissues to reflect X-rays.

For the diagnosis of the cause of death, a necropsy protocol is necessary (Jsseldijk et al., 2019). It is essential to follow the protocol to have a standardization of the method and to be able to observe objectively. However, some adaptations of the protocol may be influenced by the situation (species, sex, condition of the specimen, etc.). Before the necropsy, a diagnostic imaging technique can give an idea of the condition of the tissues inside the animal (Kot et al., 2020). Consequently, the protocol can be refined to improve the diagnostic purpose. For example, the knowledge of a probable foreign body, displayed with a different grayscale, can lead to operation, during necropsy in a specific body region, with greater attention to visualizing the body and the consequent lesions. Therefore, carrying out diagnostic imaging prior to the necropsy is an excellent help for diagnosis.

Between January 2021 and March 2022, computerized tomography scans were carried out on 22 specimens belonging to 6 different species (*Stenella coeruleoalba, Stenella frontalis, Delphinus dephis, Tursiops truncatus, Globicephala macrorhropsynchus, Grampus griseus*) prior to the necropsy protocol. The main findings were fractures, pneumothoraxes and the presence of foreign bodies.

Key words: Computed tomography, foreign body, diagnostic imaging techniques

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