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INJURIES IN A DOG ASSOCIATED WITH A PERFURO-CUTTING INSTRUMENT: CASE REPORT

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Legal veterinary medicine or forensic veterinary medicine is a specialty recognized by resolution n° 756/2003 of Veterinary Medicine Federal Council, which deals with the application of veterinary medicine knowledge for the purposes of law and justice (ARNS; REIS, 2011). This resolution is not recent, and it has been established in the Brazilian constitution since 1933, describing that in judicial issues involving animals as an exclusive veterinarian function (SABES; GIRARDI; VASCONCELOS, 2016). However, there are few veterinarians working in this field, leaving space to other professionals and leading to a lack of scientific material production (REGO, 2003; MERCK, 2007). Forensic traumatology is the branch of legal medicine that studies the injuries caused by materials or moral nature, harmful to the body, physical or mental health (CROCE; CROCE JÚNIOR, 1998). The lesions are divided into mechanical, physical, chemical, physicochemical and biodynamic energies

(DEL CAMPO, 2009). The mechanical action energies act on the body and modify its state of rest or movement, resulting in injury. They can act in different ways according to the agents who carry them. The lesions can be produced by the action of the instrument on the body, by the action of the body on the instrument or by a combination of them, when one acts on the other (DEL CAMPO, 2009). The instruments that cause the lesions, according to the contact surface, the mode of action and the characteristics of the lesions generated are classified as: simple action (perforating or puncturing, sharp and forceful) and composite action (piercing, piercing and punctuating) (DEL CAMPO, 2009). Lesions generated by perforating mechanical energies result in a linear path continuity solution with an exit orifice of smaller diameter than the input. Cutting instruments cause incised lesions that have greater depth at the original point, smooth and regular margins. Blunt instruments can generate different types of injuries: ecchymosis and hematoma, excoriation, brain concussion and contusion, bone contusion, bone fractures, dislocations and sprains. Sharpening instruments cause puncture incisional lesions are deeper than wide, the shape and the course of the lesion allow to define which instrument was used. These instruments generate puncture-related injuries, such as those generated by firearm projectiles. Short-term injuries are called short-cuts and act by pressure exerted on a line and are influenced by the weight action of the instrument used or by the force of the person who manipulated it (SABES; GIRARDI; VASCONCELOS, 2016). This paper aims to report a case of sharp injury in a dog, and the importance of veterinary medicine expertise to elucidate cases of mistreatment against animals. The corpses of a 10-year-old male dog was referred for necropsy examination and, according to the owner, the dog had free access to the street. The animal was in good condition, and received treatment with Phenobarbital until the day before the death. The animal was found in lateral decubitus and agonizing in front of neighbor's house, it was also noticed several cuts and accentuated amount of blood flowing through the nostrils. In the necroscopic examination, it was noticed pale oral, ocular and penile mucosa, a focal area of excoriation in the abdomen, and left flank of 8.0cm in length. In addition, several puncture-sharp lesions were observed, two parallel to the right thoracic region and measuring 0.5cm in diameter. The other two were

seen in topography of coxal bone and measured 0.8cm. In the cervical region two puncture-cutting lesions of 0.8cm in diameter were noted, and on the right lateral side there were two parallel perforate-cutting lesions of 0.6 x 0.4 and a subcutaneous hematoma.

In the left lateral cervical region there was a perforate-dilacerating lesion (1.5cm in diameter). And in the topography of the atlanto-occipital joint another lesion that mediates 4.5 X 2.5cm, with exposure of muscular layer. During the opening of the corpses it was noted a hematoma in musculature and in the subcutaneous tissue of the abdominal area and in the adjacent area to the jugular vein, diffuse hemorrhage in submandibular regions, costal gradil and left flank. No similar lesions were seen in internal organs. The necropsy findings suggest that the death was caused by hypovolemic shock (hemorrhage) caused by secondary bleeding to puncture-sharp lesions generated by a piercing-cutting object as described by Del Campo (2009) and Sabes, Girardi and Vasconcelos (2016). In human medicine the medical traumatology studies the injuries produced by violence on the human body. There are numerous determinations and points to be evaluated in cases of a criminal death. Veterinary medicine still lacks further studies and literature concerning cases of animal abuse. The present investigation emphasizes some of these points, such as the need to standardize the language to be used in a medical-veterinary expert report.

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POST-VACCINATION DEATH IN A MALFORMED CAT: CASE REPORT

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Introduction: Diaphragmatic hernia is a condition in which there is displacement of the abdominal viscera into the thoracic cavity. This condition can be acquired or congenital. In most cases, it is a condition acquired through a traumatic process. Congenital diaphragmatic hernia is a malformation whose reason is unknown, and symptoms usually appear before the first year of life and may lead to death, however, some may remain asymptomatic for life. Macroscopically, there is a communication between the thoracic cavity and the abdominal cavity through an opening in the diaphragm. The differentiation between congenital and traumatic diaphragmatic hernia is delicate and not always possible. It is based on anamnesis, in the presence or absence of trauma, in clearly traumatic lesions of the diaphragm, mainly in the coexistence of two or more holes in one of its sides, in the presence or absence of visceral or vascular anomalies, and others. The macroscopic aspect of the orifice and the histological examination of the borders are not very reliable, since in old traumatic hernia there may be no tissue reaction and in congenital hernias, frequent visceral transit, irritating the edges or compressing by strains, can trigger an inflammatory reaction. The differentiation between congenital and traumatic leading to forensic consequences may represent the primary cause of death or be ancillary causes of death. Forensic necropsy is a practice that aims to determine the cause of death of the animal