

(ELSHEIKHA *et al.*, 2016). Laboratory findings are not pathognomonic for aerulostrongylosis, but leucocytosis, eosinophilia, anaemia and hypoalbuminemia have been reported (YILDIZ *et al.*, 2011). According to the Veterinarian's Code of Ethics in Brazil (BRASIL, 2007), mistreatment is committed by those who acts hastily and without care. It is the combination of foolishness plus lack of reflection in the professional action, and it is a serious error because the vet could not claim ignorance in the practice, yet he or she has studied the procedures during university. Veterinary negligence is characterized by the omission, passivity and indifference of a professional that has the knowledge and doesn't act in a proper and professional manner, resulting in prejudice to the patient/owner. An anesthetic procedure depresses a lot respiratory rate and nervous system. If an animal has pneumonia, its alveoli could not expand normally. Also, it was verified that many evolutive nematoid worms were taking part in the lung parenchyma, the available surface area for gas exchange. Furthermore, Gerdin *et al.* (2011) supports that sedation or anaesthesia may reduce cat's ability to compensate for diminished air surface area in aerulostrongylosis, compromising lung perfusion and ventilation, which can lead to hypoxia, systemic hypotension and cardiovascular arrest. The conclusion is that preliminary exams made before submitting one animal to an anesthetic procedure could be essential for the patient's life.

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## SUDDEN DEATH OF A DOG AFTER STRESS OCCURRED IN PET SHOP: CASE REPORT

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The retail business known as “pet shops” or “pet stores” are places where medicines, food, and accessories for animals are commercialized, and many of them provide other services such as hygienic care (pet cleaning and grooming). In Brazil, this field of activity is increasing every year, and it is estimated that the city

of São Paulo has more than 4,000 pet shops available (ASSOCIAÇÃO BRASILEIRA DA INDÚSTRIA DE PRODUTOS PARA ANIMAIS DE ESTIMAÇÃO, 2014). Brazilian pet industry was responsible for an income of R\$ 18 billion in 2015, a growth of 7.6% over 2014, and occupies the third place in the worldwide market (PETBRASIL, [201-]). Though the first demand of pet shops is for pet food, hygienic care of dogs and cats occupies the second place (ASSOCIAÇÃO BRASILEIRA DA INDÚSTRIA DE PRODUTOS PARA ANIMAIS DE ESTIMAÇÃO, 2014). Another element that contributes for the growing of pet sector is “humanization” of pets, as well as the fact that many owners don’t have time or skill to perform the proper hygiene of their animals (ASSOCIAÇÃO BRASILEIRA DA INDÚSTRIA DE PRODUTOS PARA ANIMAIS DE ESTIMAÇÃO, 2014; CONSELHO REGIONAL DE MEDICINA VETERINÁRIA DO ESTADO DE SÃO PAULO, 2015). Due to anxiety, aggression, and panic that some animals may present during bathing or grooming, some of them could die from respiratory collapse as a result of stress (MARIA; REGO; MAIORKA, 2013). In these animals, the death Results: from edema and pulmonary hemorrhage, and it can happen in a few minutes after the onset of clinical signs (MARIA, 2010). Psychological, physical and social stressors are classified according to duration (acute or chronic), intensity (low, moderate or high) and other characteristics. Cold, heat, noise and vibration are considered physical stressors. Anxiety, fear, and frustration are included in psychological stressors; dominance, the Introduction: of new individuals into the habitat, transfer of habitats, are examples of the social ones (PACAK; MCCARTY, 2007). These stressors can imbalance animal homeostasis and change biological functions (SELYE, 1936; SELYE, 1956; MOBERG, 2001). It is important that people who works in pet shops are suitably qualified, mainly to be able to use the correct techniques and to recognize the signs that these animals could present and minimize the occurrence of deaths during procedures (MARIA *et al.*, 2015). This case report has is the description of an animal death related to stressing factors in a pet shop, aiming to contribute to the scarce literature on factors that interfere with animal welfare. A female dog, Shih Tzu, four years old, was sent to the necroscopic exam after a sudden death in a pet shop. The owner reported no clinical-physical alterations and normal behavior

before being taken to the pet shop. During the bath, the dog started to become prostrated, with a loss of muscle strength. The veterinarian responsible for the pet shop was called by the groomer to give the first aids. However, the animal vomited blood and died when the medical procedure started, with no able time for evaluation. Necropsy showed ocular and anal mucosa typically colored, and red oral mucosa. Both sides of the nose and below the eyes had blood. There was also a 6cm trichotomy area associated with a discrete hematoma in the left hind limb. Trachea showed a moderate amount of red foamed liquid in the lumen, mainly concentrated in carina region. Lungs were red, and a great amount of blood drained to the cut. The liver was moderately congested. At the opening of the skull, the suture lines of fontanelles were evident marked, dura mater and brain diffusely reddish, and no bruise was observed in adjacent tissues. Other organs with no macroscopic changes worthy of note. The microscopic exam, made by hematoxylin-eosin staining, showed lungs with diffuse and severe pulmonary edema (bronchial and alveolar), severe congestion, multiple emphysematous areas with rupture of some alveoli. No notable microscopic changes were observed in the nervous system. The diagnosis concluded a severe pulmonary edema and hemorrhage, resulting in acute respiratory failure. The findings suggest respiratory collapse due to stress. Small dogs, especially the breeds Poodle, Lhasa-apso, Yorkshire, Shih-Tzu, and Maltese are the ones most likely to die from stress. Animals younger than one year of age are also more likely to die from stress. Most stressed animals die from pulmonary hemorrhage and edema (MARIA *et al.*, 2015). Animal death cases can be elucidated by necropsy, and this technique is considered one of the main instruments for legal veterinary medicine. In cases of deaths of legal interest, like recklessness, negligence, and traumas, the necropsy has been widely used (SALVAGNI *et al.*, 2014). According to Gerdinet *et al.* (2013), determination of animal abuse may have a photographic registry of the necropsy, being considered extremely important for the proof in legal cases. In conclusion, the risks that could be involved in bathing and grooming procedures should always be clarified to pet owners. Security measures and suitable qualification of professionals must be sought for the pet stores, including the presence of the veterinarian. If pet stores act with respect to the animals and the owners,

the number of deaths and the possibility of undergoing legal processes could significantly be reduced. Whenever an animal dies, regardless the situation, necropsy must be performed to establish the cause of death. A bath and grooming environment must have been seen as a harmless place because a healthy animal can die during these procedures as a result of physical or stress traumas (MARIA; REGO; MAIORKA, 2013).

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## IATROGENIC BLADDER RUPTURE FOLLOWING REPEATED CYSTOCENTESIS

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**Introduction:** Cystocentesis is a medical procedure to collect urine for diagnostic evaluation and also temporarily decompress the urinary bladder in animals with urethral obstruction. When performed correctly is a safe procedure, as long as it is performed by trained personnel. Otherwise there is risk of rupture of the bladder leading to uroabdomen and hemorrhage, culminating in some cases with patient's death. Medical procedures are a major reason to perform forensic autopsy, as some of these can cause iatrogenic conditions, which represent a state of illness, adverse effects or complications caused by or resulting from medical intervention, sometimes considered as an error. A medical error can be seen as the result of interactions between the cognitive limitations of an individual and the environment or system which influences their decisions. So, there are a lot of reasons such as lack of technical knowledge or practical ability, illness or even effects of stress, but whatever the reason of the medical error was, it could end up causing a major negative effect on the