

IDENTIFICATION OF FELINE ABUSE THROUGH A NECROPSY REPORT AND THE ROLE OF THE VETERINARIAN: A CASE REPORT

MAUS-TRATOS EM FELINO IDENTIFICADOS POR MEIO DE LAUDO
NECROSCÓPICO E O PAPEL DO MÉDICO-VETERINÁRIO: RELATO DE CASO

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ABSTRACT

Identifying animal cruelty is a major challenge in clinical and forensic practice, particularly when there is no history consistent with abuse and no conspicuous external injury. This report describes the sudden death of an adult domestic cat that was initially attributed to a non-traumatic cause. The investigation integrated clinical information, necropsy examination, histopathology, and radiographic assessment of the cohabiting cat. Necropsy revealed bilateral rib fractures at different stages of healing, intracavitary hemorrhage, renal avulsion, and mesenteric lacerations. Histopathology demonstrated both acute and chronic changes, including hemorrhage, fibrin deposition, and intercostal fibrosis, confirming that traumatic episodes had occurred at different times. The overall findings were consistent with non-accidental blunt-force polytrauma, with hypovolemic-hemorrhagic shock as the terminal mechanism of death. Radiographs of the cohabiting cat also showed multiple rib fractures and pneumothorax, further supporting the suspicion of repeated violence. This case demonstrates that severe trauma may remain undetected when assessment is limited to external signs. It also highlights the importance of necropsy, complementary examinations, rigorous scientific documentation, and chain-of-custody procedures for establishing the cause of death, producing reliable forensic evidence, and supporting the legal accountability of individuals responsible for animal cruelty.

Keywords: Animal Pathology; Forensic Examination; Veterinary Legal Medicine; Necropsy; The Link Theory.

RESUMO

A identificação de maus-tratos em animais constitui desafio relevante na prática clínica e pericial, sobretudo quando não há histórico compatível com agressão nem lesões externas evidentes.

Este trabalho relata a morte súbita de uma gata doméstica adulta, inicialmente atribuída a causa não traumática. A investigação integrou informações clínicas, exame necroscópico, histopatologia e avaliação radiográfica do felino coabitante. A necropsia revelou fraturas costais bilaterais, com lesões em diferentes estágios de consolidação, hemorragia intracavitária, avulsão renal e lacerações mesentéricas. A histopatologia demonstrou alterações agudas e crônicas, incluindo hemorragia, deposição de fibrina e fibrose intercostal, confirmando a ocorrência de episódios traumáticos em momentos distintos. O conjunto dos achados foi compatível com politraumatismo contundente não acidental, tendo o choque hipovolêmico-hemorrágico como mecanismo terminal da morte. No animal coabitante, as radiografias também evidenciaram múltiplas fraturas costais e pneumotórax, reforçando a suspeita de agressões reiteradas. O caso demonstra que traumatismos graves podem permanecer ocultos quando a avaliação se limita aos sinais externos e ressalta a importância da necropsia, dos exames complementares, da documentação técnico-científica e da cadeia de custódia para a determinação da causa da morte, a produção de prova pericial e a responsabilização legal por crimes de maus-tratos.

Palavras-chave: Patologia Animal; Perícia Forense; Medicina Veterinária Legal; Necropsia; Teoria do Link.

1. INTRODUCTION

The growing humanization of companion animals has profoundly changed the relationship between guardians and their animals in recent decades. Dogs and cats have come to occupy the position of family members and are frequently regarded as pet children, a phenomenon driven by demographic changes, smaller family sizes, population aging, and greater recognition of the human-animal

bond. This transformation has increased social concern for animal welfare and encouraged the development of Veterinary Legal Medicine and Veterinary Forensic Medicine as essential fields for protecting animals and producing technical evidence in investigations of cruelty (ROGERS; STERN, 2018).

Alongside the strengthening of this bond, reports of animal cruelty have increased substantially in several countries. Although dogs account for a large proportion of reported victims, cats possess biological and behavioral characteristics that often hinder the early recognition of violence. Because cats tend to conceal clinical signs of pain and vulnerability, they may display only subtle behavioral changes for prolonged periods, delaying diagnosis and allowing severe injuries to progress until death (ALMEIDA *et al.*, 2018).

Behavioral changes are common and nonspecific manifestations of discomfort in cats and may result from environmental factors, organic disease, or painful conditions. The identification of cruelty is particularly challenging when the clinical history does not suggest aggression and external injuries are absent or discreet, because blunt-force trauma may cause extensive internal damage while the skin remains intact (MUNRO; THRUSFIELD, 2001a). In this context, complementary examinations, especially necropsy, histopathology, and diagnostic Imaging, play a central role in determining the cause of death and characterizing the injury (MERCK, 2012).

A finding of considerable forensic value is the coexistence of lesions at different stages of repair, a pattern classically associated with repeated trauma and strongly suggestive of non-accidental injury, historically described in the literature as battered pet syndrome (MUNRO; THRUSFIELD, 2001a, 2001b).

Accurate documentation of these findings gives the report evidentiary value and supports accountability under Brazilian Law No. 9,605/1998, with the enhanced penalties established by Law No. 14,064/2020 for offenses against dogs and cats, as well as the characterization of abuse, cruelty, and mistreatment under Federal Council of Veterinary Medicine Resolution No. 1,236/2018 (BRASIL, 1998, 2020; CONSELHO FEDERAL DE MEDICINA VETERINÁRIA, 2018). The description of fatal polytrauma in a female cat whose death was initially attributed to natural causes demonstrates the importance of veterinary intervention and the judicious use of complementary examinations in diagnosis, evidence production, and the medico-legal investigation of animal cruelty.

Accordingly, this case report describes non-accidental trauma in a domestic cat diagnosed through necropsy and anatomopathological examinations. It emphasizes the importance of integrating clinical medicine, pathology, histopathology, and Veterinary Forensic Medicine to identify cruelty, determine the cause of death, and produce forensic evidence capable of supporting the legal accountability of the perpetrator.

2. CASE REPORT

On February 2, 2020, a four-year-old spayed female mixed-breed cat was examined at a private veterinary clinic. The cat was kept exclusively indoors, had overdue annual vaccinations, and had no known ectoparasite or endoparasite infestation. She lived with a male littermate. The initial reason for consultation was a behavioral change: the female had become more withdrawn and fearful.

The guardian reported weight loss, hyporexia, isolation, defecation outside the litter box, which was unprecedented for the cat, and persistent hiding in different areas of the home. During history taking, she mentioned a recent change in household dynamics caused by the arrival of a new resident, her partner. Physical examination revealed approximately 5% dehydration and a body condition score of 4/9, with no other clinically significant abnormalities. No locomotor impairment, pain on palpation, or external injury was detected. Laboratory testing disclosed a mild increase in serum alanine aminotransferase (ALT) activity, whereas the remaining variables were within their respective reference intervals.

Considering the clinical manifestations and the information provided by the guardian, including the recent change in family dynamics, the addition of wet food to the cats' diet, environmental enrichment, the use of synthetic pheromones, and guidance regarding interaction with the new resident were recommended. Because the ALT increase was mild and the patient had recently lost weight, monitoring was elected. A follow-up examination was recommended after 30 days.

At the follow-up visit, the patient had gained approximately 200 g, although her isolative behavior persisted. After physical examination, her vaccination protocol was updated with feline core and rabies vaccines. The appointment lasted a further 30 minutes, after which the patient was discharged. Approximately four hours later, the guardian contacted the clinic to report the animal's sudden death.

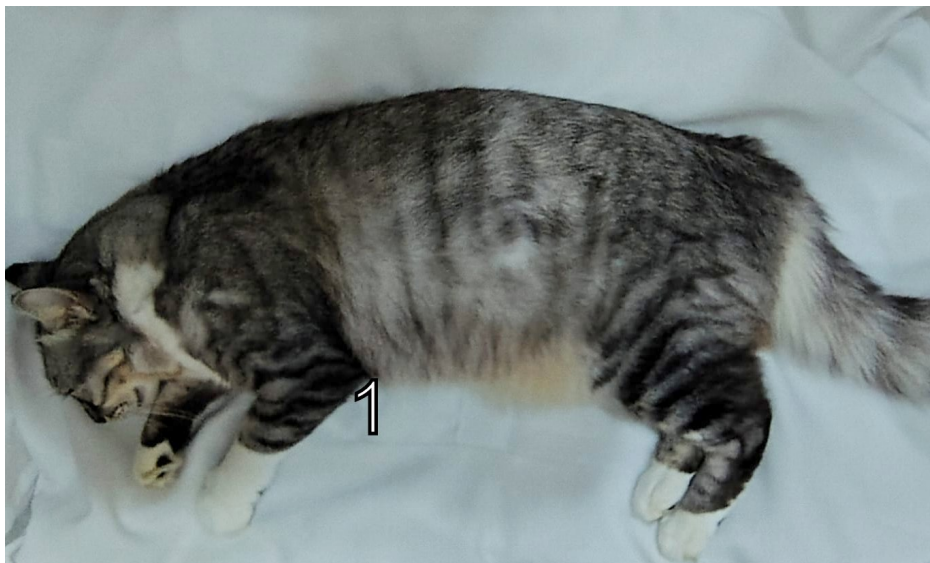
According to the guardian, she was away from the residence when the new household member telephoned to report that he had

found the cat dead. He also stated that a dead bee was nearby, initially raising suspicion of an anaphylactic reaction. The guardian was instructed to bring the animal's body to the clinic immediately for a preliminary clinical investigation of the cause of death. External examination of the cadaver disclosed no apparent traumatic injuries, and the body was subsequently submitted for necropsy.

2.1. Gross Necropsy Findings

The body showed moderate depletion of adipose tissue, and the ocular mucous membranes were moderately pale (Figure 1).

Figure 1 – Cadaver



Source: Necropsy report (2020).

The bilateral abdominal subcutis contained extensive foci of tissue-plane separation, with friable, necrotic, and hemorrhagic adipose tissue (Figure 2).

Figure 2 – Hemorrhage and necrosis of the abdominal subcutaneous tissue



Source: Necropsy report (2020).

Within the abdominal cavity, the omentum and mesentery contained multiple areas of disruption and necrosis, particularly in the retroperitoneum. A focal mesenteric area adjacent to the duodenum was ruptured and had an adherent dark-red blood clot (Figure 3).

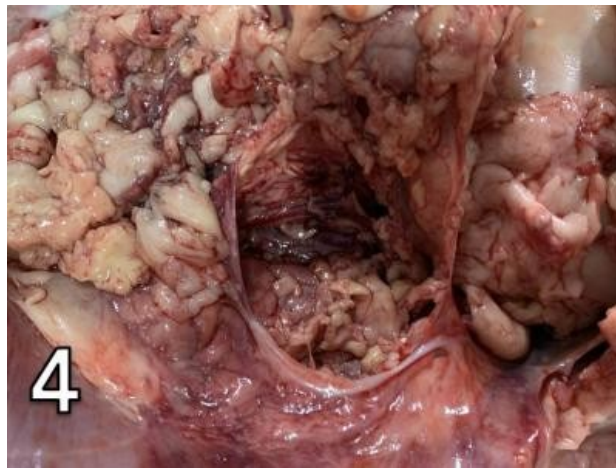
Figure 3 – Mesenteric laceration with an adherent blood clot



Source: Necropsy report (2020).

The left kidney was completely avulsed from the renal bed, although its vessels and ureter remained intact; adjacent hemorrhage was present (Figure 4). The left adrenal gland contained hemorrhagic areas.

Figure 4 – Avulsion of the left kidney.



Source: Necropsy report (2020).

Within the thoracic cavity, the right eighth through thirteenth ribs contained firm swellings measuring approximately 0.6 cm and resembling osseous calluses. Complete fractures surrounded by moderate hemorrhage were present dorsally in the left tenth through thirteenth ribs (Figure 5).

Figure 5 – Rib fractures: osseous calluses (right ribs 8–13) and complete fractures with hemorrhage (left ribs 10–13).



Source: Necropsy report (2020).

The lung contained red foci in the left cranial and middle lobes and bilaterally darkened caudal diaphragmatic portions (Figure 6).

Figure 6 – Lung with darkened diaphragmatic lobes



Source: Necropsy report (2020).

The liver was yellow and friable, with accentuation of the lobular pattern.

2.2. Histopathology

Microscopically, the pulmonary parenchyma exhibited severe, diffuse fibrinohistiocytic and hemorrhagic bronchointerstitial pneumonia, accompanied by type II pneumocyte hyperplasia, mild alveolar fibrosis, fibrosing pleuritis, and metaplasia of the ciliated epithelium. This constellation of changes characterized a lesion of mixed duration, in which acute manifestations, represented by hemorrhagic extravasation and fibrin deposition, coexisted with chronic reparative changes, including fibrosis, epithelial metaplasia, and compensatory proliferation of alveolar pneumocytes (REINERO, 2019).

The intercostal skeletal muscle contained severe multifocal-to-coalescing fibrosis, consistent with scarring caused by previous traumatic injury (CHOLOK *et al.*, 2017). The left adrenal gland exhibited extensive hemorrhage associated with tissue necrosis, whereas the liver showed multifocal microvacuolar hepatocellular degeneration compatible with hepatic lipidosis (CULLEN, 2009; BLOURGE *et al.*, 1994; WEBB, 2018). Extensive foci of adipose tissue

necrosis were accompanied by marked hemorrhagic infiltration (RESSEL *et al.*, 2016; BARINGTON *et al.*, 2016, 2018).

Conversely, the myocardium and central nervous system showed no histopathological changes of diagnostic relevance. Integration of the gross and microscopic findings supported a morphological diagnosis of severe polytrauma, characterized by multiple traumatic injuries involving different organ systems (INTARAPANICH *et al.*, 2016).

Because another cat lived in the same household and hereditary disease, particularly congenital heart disease, was initially considered, the cohabiting animal underwent clinical and diagnostic imaging assessment. Radiographs revealed multiple rib fractures associated with pneumothorax, findings incompatible with congenital disease and strongly suggestive of non-accidental blunt-force trauma (TONG, 2014).

The anatomical distribution of the lesions, the multiplicity of the fractures, and the absence of a history consistent with an accidental event further supported the hypothesis of repeated aggression. The injury pattern was consistent with successive episodes of violence and corroborated the suspicion that both animals had been subjected to cruelty.

3. RESULTS AND DISCUSSION

The hypotheses of a post-vaccination adverse reaction, Hymenoptera envenomation, and congenital heart disease were excluded. Adverse reactions to feline vaccination are manifested mainly by lethargy, anorexia, fever, and injection-site inflammation; anaphylaxis accompanied by vomiting, diarrhea, facial edema,

respiratory distress, and circulatory collapse occurs only rarely (STONE *et al.*, 2020). Similarly, Hymenoptera envenomation may cause anaphylaxis, coagulopathy, and, exceptionally, spontaneous hemoperitoneum, but it has no mechanism capable of simultaneously producing complete rib fractures, renal avulsion, and traumatic mesenteric lacerations (CALDWELL *et al.*, 2018). Congenital feline heart diseases cause structural cardiac abnormalities, murmurs, exercise intolerance, tachypnea, dyspnea, pulmonary hypertension, or congestive heart failure; they do not explain bone discontinuities or traumatic rupture of organs and tissues (SARCINELLA; BODE, 2019; BLOCK; GLASSMAN, 2019). In contrast, multiple rib fractures and rupture or avulsion of abdominal structures are recognized consequences of high-energy blunt-force trauma (PHILP; HAMMOND, 2018; COLLINS-WEBB *et al.*, 2020).

The incompatibility between the initial clinical suspicion and the gross and histopathological findings resulted in a profound diagnostic reorientation: a death initially interpreted as sudden and probably natural was reclassified as unequivocal lethal polytrauma. This scenario underscores the indispensability of necropsy in deaths of undetermined etiology, as widely recognized in Veterinary Forensic Medicine (REBOLLADA-MERINO *et al.*, 2020).

From this perspective, postmortem examination goes beyond merely determining the cause of death. It is a technical and scientific instrument capable of directing an investigation, clarifying the sequence of events, and converting nonspecific clinical hypotheses into objectively supported forensic evidence (MERCK, 2012).

The most significant forensic finding was the presence of traumatic injuries at different chronological stages. Fractures of the right

eighth through thirteenth ribs exhibited abundant osseous callus formation, severe fibrosis of the intercostal musculature, and pulmonary changes compatible with chronic repair, indicating that these injuries had occurred weeks or months before death (MUNRO; MUNRO, 2013).

In contrast, the complete fractures of the left tenth through thirteenth ribs were surrounded by marked infiltrative hemorrhage without evidence of organization or callus formation, characterizing recent traumatic injuries (RESSEL *et al.*, 2016). These fractures were associated with renal avulsion and mesenteric lacerations, changes compatible with high-intensity blunt forces capable of producing compression, traction, and shearing of vascular pedicles and visceral supporting structures (RESSEL *et al.*, 2016; COLLINS-WEBB *et al.*, 2020). Infiltrative hemorrhage, when associated with microscopic evidence of fibrin deposition, perivascular leukocyte migration, or erythrophagocytosis, supports the interpretation of vital injuries caused by antemortem trauma near the time of death, while active circulation and tissue responsiveness were still present (RESSEL *et al.*, 2016; HILBE *et al.*, 2024).

The coexistence of injuries at different stages of tissue repair is one of the most important indicators of repeated violence described in the veterinary medical literature.

According to Munro and Thrusfield (2001a, 2001b), this injury pattern is unlikely to result from a single accidental traumatic event and constitutes strong evidence of successive episodes of aggression. This temporal stratification, often described as a repeated-trauma pattern, has substantial diagnostic and evidentiary value because it permits reconstruction of the chronology of injuries and provides

stronger scientific support for the characterization of chronic cruelty. The evidentiary value was further increased by radiographic evaluation of the cohabiting cat, which also showed multiple rib fractures and pneumothorax. The violence therefore was not restricted to the necropsied animal but extended to another individual in the same household, strengthening the interpretation of repeated aggression.

Regarding the pathophysiology of death, the extensive intracavitary hemorrhage documented at necropsy, together with the pronounced pallor of the mucous membranes, indicated that the terminal mechanism was hypovolemic-hemorrhagic shock caused by acute blood loss secondary to polytrauma. The abrupt reduction in circulating blood volume compromises venous return, cardiac output, and tissue oxygenation and may culminate in hypotension, cellular hypoxia, organ dysfunction, and cardiorespiratory arrest (GRAY *et al.*, 2018; HERNON *et al.*, 2018; RIMER *et al.*, 2020).

The metabolic changes, particularly microvacuolar hepatocellular degeneration compatible with lipid accumulation and the previously documented increase in serum ALT activity, may be interpreted as secondary consequences of systemic compromise. In cats, anorexia and negative energy balance promote marked mobilization of fatty acids from adipose tissue and their accumulation in hepatocytes, potentially resulting in hepatic lipidosis. In parallel, hypoperfusion and hypoxia associated with hemorrhage and shock may cause hepatocellular injury and increased serum ALT activity (WEBB, 2018; MINAMOTO *et al.*, 2019; KOOK; BAUMSTARK; RUETTEN, 2019; HAAKER *et al.*, 2020). These findings alone do not establish primary liver disease and are better interpreted as secondary manifestations of systemic stress and metabolic compromise, with no

anatomopathological evidence supporting their participation as the primary cause of death.

Integrated interpretation of the clinical, laboratory, necropsy, histopathological, and radiographic findings was therefore essential for establishing the causal relationship between the traumatic injuries and death, lending substantial technical and forensic consistency to the conclusions.

Healing fractures and severe intercostal fibrosis necessarily indicate that the animal experienced considerable chronic pain before death. Cats, however, have a distinctive behavioral pattern of pain expression and tend to conceal overt manifestations. Pain may instead be expressed through nonspecific signs such as social withdrawal, reduced interaction with guardians, and changes in feeding behavior (STELLA *et al.*, 2011; STELLA *et al.*, 2013). This behavioral suppression of pain, widely documented in ethological and clinical literature, highlights the importance of recognizing subtle, persistent signs of physical suffering, particularly when cruelty is suspected.

Identifying cruelty is one of the greatest challenges in clinical and forensic practice, especially when there are no witnesses, no compatible history, and no obvious external injuries. Several forms of blunt-force trauma produce extensive internal damage with minimal cutaneous manifestations, making recognition of the true cause of death difficult during clinical examination. Necropsy is therefore indispensable for characterizing injuries, determining the cause of death, and distinguishing accidental from non-accidental trauma, thereby enabling the appropriate medico-legal

interpretation of the findings (TONG, 2014; McDONOUGH; McEWEN, 2016).

The principal forensic indicators of violence include the anatomical distribution of injuries, inconsistency between the reported history and necropsy findings, multiple fractures, extensive internal hemorrhage, and, most importantly, lesions at different stages of evolution. Tong (2014) demonstrated that specific morphological features of fractures can help distinguish accidental mechanisms from deliberate aggression and therefore constitute an important tool in Veterinary Forensic Medicine. Retrospective studies likewise show that combining clinical, necropsy, and histopathological findings substantially improves diagnostic reliability in suspected animal abuse cases (ALMEIDA *et al.*, 2018).

Advances in complementary diagnostic methods have also increased the accuracy of forensic investigations. Postmortem imaging techniques, including radiography and computed tomography, can identify fractures, hemorrhage, foreign bodies, and other abnormalities before necropsy, assisting with planning the anatomopathological examination and preserving evidence. Recent studies demonstrate that integrating diagnostic imaging, necropsy, and histopathology substantially improves the quality of forensic evidence produced in cruelty investigations (WATSON; BAUCOM, 2020; YAMADA *et al.*, 2023).

3.1. The Link Theory

Beyond determining the cause of death, Veterinary Forensic Medicine has an important role in protecting public health and collective safety. The literature demonstrates a consistent association

between cruelty to animals and other forms of interpersonal violence, a phenomenon known as The Link Theory (ALMEIDA *et al.*, 2018; NAKAMURA, 2025). Early recognition of animal abuse may therefore protect animal victims and contribute to preventing domestic violence, child abuse, and other offenses against people. This association underscores the veterinarian's role as a professional within the broader social protection network (LOCKWOOD; ARKOW, 2016).

3.2. Importance Of Veterinary Forensic Medicine

Veterinary Forensic Medicine applies medical, biological, and animal science knowledge to legal matters involving animals. Its scope includes criminal, civil, administrative, and environmental proceedings concerning cruelty, neglect, poisoning, professional malpractice, illegal wildlife trade, food fraud, animal attacks, and suspicious deaths. Unlike conventional clinical care, forensic examination is intended to produce scientifically supported evidence that can assist law-enforcement authorities, judges, and other justice-system professionals in reconstructing events (ROGERS; STERN, 2018).

In Brazil, the relevance of this specialty has increased with stronger legal protection for animals. Law No. 14,064/2020 increased the penalties for abuse and cruelty committed against dogs and cats, establishing imprisonment for two to five years, a fine, and prohibition of animal custody (BRASIL, 2020). Within this context, veterinarians may serve as official experts, court-appointed experts, or technical assistants and may examine living animals, cadavers, biological fragments, food products, crime scenes, and documents.

The investigation must be conducted methodically, including the recording of history, scene examination, animal identification, photographic documentation, and appropriate evidence collection. Every item must be identified, packaged, sealed, and tracked through the chain of custody. These procedures reduce the risk of contamination, exchange, or loss of samples and preserve their legal validity. Digital documentation technologies may improve efficiency but should be validated and should not replace high-resolution photography of small lesions (PIEGARI *et al.*, 2018).

In deceased animals, forensic necropsy seeks to establish the cause, mechanism, and circumstances of death. External and internal examinations should be supplemented, as appropriate, by histopathology, toxicology, microbiology, genetics, radiology, and entomology. Microscopic analysis may help determine whether an injury occurred during life and identify inflammatory, reparative, or degenerative reactions. Entomology assists with estimating the postmortem interval and investigating neglect associated with arthropod infestation (MCGARRY *et al.*, 2018). Brazilian studies demonstrate that combining case history, necropsy, and complementary examinations provides relevant information for interpreting trauma and poisoning (SOUZA *et al.*, 2021).

The expert must remain impartial, consider alternative hypotheses, and clearly distinguish observations, interpretations, and conclusions (PARRY, 2019).

Veterinary forensic pathology is simultaneously one of the main scientific instruments for producing technical evidence. Proper documentation of injuries, careful evidence collection, histopathological examination, and integrated interpretation of

clinical and anatomopathological findings can reconstruct the dynamics of trauma and establish the causal relationship between injury and death. McDonough and McEwen (2016) emphasize that the primary purpose of forensic pathology is the objective search for scientific truth, providing technical support for judicial decisions and the accountability of those who commit crimes against animals.

From the perspective of Veterinary Legal Medicine, this case clearly demonstrates the importance of complementary examinations in converting an initially nonspecific clinical hypothesis into consistent technical and scientific evidence capable of supporting criminal proceedings and forensic practice (VERKERK; SHEHATA, 2026).

Based on the necropsy report and the diagnostic imaging findings in the cohabiting animal, the guardian filed a police report concerning suspected animal cruelty and identified her partner as the probable perpetrator. During the criminal investigation, the suspect was formally charged but subsequently entered into a non-prosecution agreement, acknowledged having inflicted the injuries on the animals, and assumed obligations intended to repair the harm caused by his conduct. A civil action seeking compensation for the guardian's material losses and emotional harm was filed concurrently.

The consistency between the technical forensic evidence and the defendant's acknowledgment demonstrates the substantial evidentiary force that veterinary documentation may acquire in judicial proceedings when it is prepared with scientific rigor and in accordance with forensic protocols. Pursuant to Brazilian Law No. 9,605/1998, Law No. 14,064/2020, and Federal Council of Veterinary Medicine Resolution No. 1,236/2018, veterinarians must recognize,

record, preserve, and report indications of animal cruelty, thereby performing a technical and scientific function of considerable importance to fact-finding and criminal prosecution.

Veterinary Forensic Medicine thus consolidates its position as an indispensable instrument for producing qualified evidence. It contributes not only to safeguarding animal welfare but also to strengthening judicial protection and the effectiveness of the justice system by supplying technical information that enhances the reliability of judicial decisions (BRASIL, 1998, 2020; CONSELHO FEDERAL DE MEDICINA VETERINÁRIA, 2018).

4. FINAL CONSIDERATIONS

This case report demonstrated that severe traumatic injuries may remain undiagnosed when clinical assessment is limited to external signs, particularly when there is no history consistent with aggression and no clinical manifestation suggestive of violence. This diagnostic limitation is even more pronounced in cats, whose behavioral characteristics frequently conceal pain and suffering and may delay or prevent recognition of cruelty. In this case, necropsy, complementary examinations, and integrated interpretation of the gross and histopathological findings were indispensable for correctly establishing the cause of death and characterizing polytrauma as a lethal mechanism incompatible with natural disease or an isolated accident.

The findings reinforce the importance of Veterinary Forensic Medicine in elucidating suspicious deaths of companion animals. Careful anatomopathological analysis identified lesions compatible with blunt-force trauma and changes at different stages of

evolution, strengthening the interpretation of repeated aggression. This evidentiary set demonstrates that the veterinarian's role extends beyond clinical care and assumes strategic importance in producing technical and scientific evidence used to reconstruct events, clarify the cause of death, and support authorities responsible for criminal prosecution and judicial protection.

From a legal and forensic perspective, the case illustrates the importance of detailed injury documentation, appropriate evidence preservation, and reports founded on recognized scientific criteria. The technical robustness of this evidence increases the reliability of investigations and strengthens the accountability of those responsible for animal cruelty, thereby contributing to the effectiveness of animal-protection legislation and the administration of justice. The growing convergence of Veterinary Pathology, Veterinary Legal Medicine, and Forensic Sciences also demonstrates the need for continuous professional development, particularly in anatomopathological diagnosis, chain of custody, evidence collection, and forensic interpretation.

Although this study has the limitations inherent to case reports and does not permit epidemiological extrapolation or conclusions regarding the prevalence of cruelty against cats, its findings contribute to the specialized literature by demonstrating the importance of a multidisciplinary approach to suspicious animal deaths. Future studies involving larger case series, multicenter analyses, and standardized forensic protocols may expand knowledge of injury patterns associated with violence against cats, refine diagnostic criteria, strengthen Veterinary Forensic Medicine, and inform public policies aimed at preventing animal cruelty and

addressing the interpersonal violence frequently associated with these offenses.

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