

# 29<sup>th</sup> FECAVA EUROCONGRESS

2024



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## 12<sup>th</sup> Hellenic Companion Animal Veterinary Congress - HVMS

Abstract Book

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# Flash Presentations

## EP01

### EFFECT OF INTRAVENOUS MAGNESIUM SULPHATE ON ANALGESIC REQUIREMENTS AND POSTOPERATIVE PAIN IN DOGS UNDERGOING OVARIOHYSTERECTOMY

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There are only a few studies investigating the potential anaesthetic or analgesic-sparing effects of magnesium administration in dogs, with rather ambiguous results. The primary outcomes of this prospective, randomized, blinded, controlled clinical study were the acute postoperative pain and the rescue analgesia requirements assessment. Secondary objectives included the anaesthetic requirement evaluation, measurements of magnesium levels and its potential side-effects. Twenty-six female dogs were scheduled for elective ovariohysterectomy (OVH). Dexmedetomidine 4 µg/kg and buprenorphine 20 µg/kg were administered IM for premedication. Meloxicam 0.1 mg/kg was administered IV and magnesium sulfate 50 mg/kg, followed by continuous infusion of 20 mg/kg/h until the end of the surgery was administered in the Magnesium group. Induction was accomplished with propofol, anaesthesia was maintained with isoflurane, and fentanyl 1 µg/kg IV was administered according to autonomic responses. Postoperative pain management included paracetamol 10 mg/kg BID and meloxicam 0.1 mg/kg SID for 5 days orally. Pain assessments were performed at 1, 2, 4, 8, 12, 18, 24, 36 and 48 hours after extubation utilizing the NRS and the Glasgow pain scale, and buprenorphine 10 µg/kg IV was administered as rescue analgesia. Blood samples were obtained pre- and postoperatively for total magnesium measurements, and side-effects and recovery quality were also evaluated. Magnesium administration resulted in lower pain scores 1 hour after extubation, however, no opioid-sparing effect was observed during the intraoperative or postoperative periods. Furthermore, magnesium exhibited a propofol-sparing but not an isoflurane-sparing effect. Recovery was prolonged in the Magnesium group, however no other side-effects were observed. Intraoperative magnesium administration in dogs submitted to OVH utilizing a multimodal approach seems to contribute to the final analgesic outcome, while the current dose regimen appeared to be safe. Magnesium impact in dogs may be more obvious in more invasive operations or in opioid-free approaches.





## EP02

# EFFICACY AND SAFETY OF A NOVEL OTIC GEL CONTAINING TERBINAFINE AND BETAMETHASONE ACETATE IN CLIENT-OWNED DOGS WITH YEAST-RELATED OTITIS EXTERNA

**Zorica Zivkovic**, Garcia Roberto, Nichols Michele, Grundke Stephan

Dechra Ltd.

**Objectives:** To evaluate the efficacy and safety of a novel otic gel containing terbinafine and betamethasone acetate for treatment of yeast-related canine otitis externa (OE) in a masked, randomized, placebo-controlled, multicentric study.

**Methods:** A total of 239 client-owned dogs in the USA and Europe were enrolled in the study, receiving either study drug (otic gel) or placebo (saline) on Days (D) 0 and 7. Enrolled dogs were required to have an otitis index score (OTIS3)  $\geq 6$ , and evidence of a yeast-predominant infection on cytology, confirmed by culture. Follow-up visits were on D14 and D28, with final evaluation on D45. Clinical success was an OTIS3  $\leq 3$  on D45. Overall clinical response and yeast cytology count reduction were also assessed. Safety was evaluated on clinical assessments, a hearing test, clinical pathology and adverse events.

**Results:** Treatment success rate was significantly higher in the otic gel group as compared to placebo (62.86% vs 20.00%,  $p < 0.0001$ ). Response to treatment of the otic gel dogs was considered excellent or good on D45 by 62% of veterinarians and 71% of owners. Yeast cytology count at study exit was significantly lower in the otic gel treated dogs compared to the placebo dogs ( $p < 0.0001$ ). The otic gel was safe and well tolerated.

**Conclusions:** This study confirmed the field efficacy and safety of a new otic gel for the treatment of canine OE associated with yeasts (*M. pachydermatis*) in a wide range of ages, weights and breeds of dogs.



**EP03****DETERMINATION OF THE IN VITRO INTERACTION BETWEEN OPHYTRIUM-CONTAINING EAR CLEANSER AND COMMONLY USED MEDICATED EAR DROPS IN CANINE OTITIS.**

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**Objectives:** This study aimed to determine the stability of five corticosteroids from commercially available otitis treatment ear drops when used concomitantly with an Ophytrium-based ear cleaner.

**Methods:** Five molecules contained in five commercially available medicated ear drops commonly used in otitis were studied: prednisolone in suspension (Suroalan®), betamethasone in gel (Osurmia®), mometasone in solution (Neptra®), hydrocortisone in solution for ear spray (Cortotic®), and triamcinolone in drops solution (Recicort®). The study was conducted in two stages. As a first step, a specific liquid chromatography/ultraviolet (LC/UV) method was developed to verify the accuracy of the corticosteroid-measured concentrations in the final products (both ear drops and ear cleaner), using saline as a control. In the second step, the stability of the quantified molecules was measured with the LC/UV method in the final products diluted in DOUXO® S3 CARE Ear cleaner (CevaSantéAnimale, France) and the control. The ear drops: ear lotion ratio was set at 1:4 m/m to recreate diluted conditions during clinical use. The obtained solutions were stored at 37°C and analysed at T0 and T1 (T0 + 24h) using the specifically developed chromatographic method.

**Results:** The LC/UV method accuracy was confirmed by showing a concordance > % with the expected corticosteroid concentrations in their respective Summary of Product Characteristics (SPC). For the second part of the study, steroids concentrations r





## EP04

# DIAGNOSTIC APPROACH AND SURGICAL TREATMENT OF A CASE WITH HUGE ABDOMINAL MASS

## Anastasia Giakoumetti

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**Introduction:** Splenic conditions are a cause of mortality and morbidity, most commonly in middle-aged and older dogs. They are accompanied in most cases by subtle symptoms, and the differential can include lymphoid hyperplasia, lymphosarcoma or lymphoma, hemangiosarcoma and histiocytic sarcoma. The most frequent diagnosis in splenectomized dogs is splenic lymphoid hyperplasia, while hemangiosarcoma is the most frequent malignant tumor.

**Objectives:** To present a case of an 8-year-old female dog with a large intraabdominal mass and discuss the natural course and the differential diagnosis.

**Methods:** An 8-year-old female Cockapoo presented in hospital with a distended abdomen and discomfort. She was bright and alert, with no changes in her behaviour or appetite. A complete workup with blood tests, abdominal ultrasound, thoracic and abdominal computed tomography were performed. Imaging revealed a large, heterogeneous mass in the mid-abdomen with unclear organ of origin that measured approximately 20cm X 11.2 cm X 20.2 cm and was causing marked displacement of all surrounding viscera.

**Results:** The patient was treated surgically, where a large mass attached to the spleen was identified. The mass and the spleen were resected, and the mass was sent for histopathological examination. The latter revealed splenic nodular hyperplasia (predominantly lymphoid) with concurrent hematoma formation with no evidence of an underlying malignant neoplastic process. The patient's postoperative period was uneventful, with a good recovery at her follow-up.

**Conclusions:** Splenic conditions can be challenging to diagnose due to subtle symptoms. They can be a cause of increased mortality and morbidity, but their treatment can be curative.

### **Literature:**

Fleming JM, Creevy KE, Promislow DE. Mortality in north american dogs from 1984 to 2004: an investigation into age-, size-, and breed-related causes of death. *J Vet Intern Med.* 2011;25(2):187-198. doi:10.1111/j.1939-1676.2011.0695.x3.

Ko Y-U, Bae M-K, Sur J-H, Choe N-H. Analysis of the Prevalence of Canine Splenic Mass Lesions in Republic of Korea via Histopathological Diagnosis with Immunohistochemistry. *Veterinary Sciences.* 2023; 10(4):247. <https://doi.org/10.3390/vetsci10040247>

Sabattini S, Rigillo A, Foiani G, et al. Clinicopathologic features and biologic behavior of canine splenic nodules with stromal, histiocytic and lymphoid components. *Front Vet Sci.* 2022;9:962685. Published 2022 Aug 12. doi:10.3389/fvets.2022.962685

Spröhnle-Barrera CH, McGhie J, Allavena RE, Owen HC, Palmieri C, Barnes TS. Epidemiology and Survival of Dogs Diagnosed with Splenic Lymphoid Hyperplasia, Complex Hyperplasia, Stromal Sarcoma and Histiocytic Sarcoma. *Animals (Basel).* 2022;12(8):960. doi:10.3390/ani120809602.





## EP05

### SPONTANEOUS RESOLUTION OF CAVAL SYNDROME IN 4 DOGS WITH DIROFILARIOSIS TREATED WITH SILDENAFIL.

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End-stage dirofilariasis typically requires surgical removal of the adult heartworms. In this report we describe 4 dogs with resolution of caval syndrome after sildenafil administration.





## EP06

### ESTABLISHMENT OF A SURVEILLANCE SYSTEM FOR COLLECTING REAL WORLD DATA ON CANINE CHRONIC KIDNEY DISEASE (CCKD), IN GREECE: INTEGRATING CANINE LEISHMANIOSIS IN THE DIAGNOSTIC FRAMEWORK

**Ioulia Chortara**<sup>1</sup>, Erricos Tsiplanitis<sup>2</sup>, Zois Marinos<sup>1</sup>, Eleni Pavlidou<sup>1</sup>, Athina Trachili<sup>1</sup>, Serafeim Papadimitriou<sup>3</sup>, Constantina N. Tsokana<sup>3</sup>, George Valiakos<sup>4</sup>

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**Introduction:** Canine Chronic Kidney Disease (cCKD) is a significant health issue with a highly variable progression rate. This study presents Real-World Data (RWD) on cCKD cases staged according to the International Renal Interest Society (IRIS) criteria.

**Material and Methods:** Fifty-seven veterinarians across Greece provided data on cCKD monitored in their clinics. A questionnaire captured patient and pet parent demographics, disease history, and laboratory results.

**Results:** In total, 215 cCKD cases were included, of which 79.5% were IRIS Staged 1 and 2. The enrolled dogs were 62.3% pure breeds (representing 46 breeds) and 37.7% mixed breeds. The mean weight was 16.3 kg (50% under 11 kg), and the mean age was 10.7 years (25.0% under 8 years old). Notably, 24.2% of the dogs had a previous history of Canine Leishmaniosis (CanL).

**Conclusions:** This study provides an overview of RWD data collected from cCKD cases in Greece. A significant proportion of dogs had a history of CanL, a well-recognized cause of cCKD. This is particularly relevant as CanL is now evidenced in previously unaffected European countries due to climate change, increased international travels and pet adoptions from endemic areas, suggesting that veterinarians in other countries should also consider CanL as a potential underlying cause of cCKD. Collecting RWD is crucial to monitoring disease occurrence, informing veterinarians, and raising awareness about common diseases they encounter in daily practice.

#### References:

- Bordier, M. et al. (2020) 'Characteristics of One Health surveillance systems: A systematic literature review', *Preventive Veterinary Medicine*, 181, <https://doi.org/10.1016/J.PREVETMED.2018.10.005.6>.
- Hernández-Jover, M. et al. (2021) 'Editorial: Developments in Animal Health Surveillance', *Frontiers in Veterinary Science*. Frontiers Media S.A. <https://doi.org/10.3389/fvets.2020.637364.2>.
- Maia, C. et al. (2015) 'Spread of *Leishmania infantum* in Europe with dog travelling.', *Veterinary Parasitology*, 213(1-2), pp. 2-11. <https://doi.org/10.1016/j.vetpar.2015.05.003.7>.
- Perini-Perera, S. et al. (2021) 'Evaluation of Chronic Kidney Disease Progression in Dogs With Therapeutic Management of Risk Factors', *Frontiers in Veterinary Science*, <https://doi.org/10.3389/fvets.2021.621084.3>.
- Rocha, R. et al. (2023) 'A global perspective on non-autochthonous canine and feline *Leishmania* infection and leishmaniosis in the 21st century.', *Acta Tropica*, 237, p.106710. <https://doi.org/10.1016/j.actatropica.2022.106710>.
- Roura, X. et al. (2021) 'Canine leishmaniosis and kidney disease: Q&A for an overall management in clinical practice', *Journal of Small Animal Practice*, 62(1), pp. 3-3. <https://doi.org/10.1111/JSAP.13249.4>.
- Rudinsky, A.J. et al. (2018) 'Factors associated with survival in dogs with chronic kidney disease', *Journal of Veterinary Internal Medicine*, 32(6), pp. 1977-1982. <https://doi.org/10.1111/jvim.15322.5>.







EP07

## ANTIEPILEPTIC EVALUATION OF THE “NEUROVESPINA” PEPTIDE IN EPILEPTIC DOGS

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**Objectives:** Epilepsy is the most common chronic neurological disease in dogs and humans and, in both species, antiepileptic drug refractoriness has become a problem that affects life quality. Translational medicine has been working with new therapies, where the dog is used as an epilepsy human model. The “Neurovespina” (NV) peptide was designed from a natural peptide extracted from the venom of endemic social wasps to the Brazilian Cerrado which contains neuroactive peptides that have been tested for treating neurological or neurodegenerative diseases. This peptide has good seizure control in primates and *Rattus norvegicus*. The advantages of its therapeutic use include high potency, excellent selectivity, low toxicity and immunogenicity, and fewer side effects.

**Methods:** The present study selected 10 dogs with idiopathic epileptic seizures of unknown cause within the Tier II criteria associated with the panel for diagnosing infectious diseases. Along with conventional antiepileptic medication, NV was administered at a dose of 0.4ml, every 8 hours, subcutaneously. The frequency and severity of seizures were monitored weekly for 6 to 18 months.

**Results:** Preliminary results revealed no side effects (clinical evaluation, electrocardiogram, and echocardiogram) in treated dogs and 10 other normal dogs. A reduction in monthly frequency and severity of crises was observed in at least 5 of the 10 patients, which was directly related to the owners' adherence to treatment, as the subcutaneous administration route and frequency were considered a disadvantage. All dogs had an improvement in life quality, which was attributed to cluster reduction, status epilepticus, and cognitive improvement.

**Conclusions:** Studies with larger numbers of dogs, and studies approaching transdermal administration route and serum dosage are still necessary to better define the results.





EP08

## RECURRENT CRANIODORSAL MEDIASTINAL HEMORRHAGE IN A HEALTHY DOG.

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**Objectives:** The clinical and diagnostic imaging findings in a healthy dog with recurrent bleeding in the craniodorsal mediastinal space are presented.

**Methods:** The case study is about a 4-year-old Italian Greyhound presented at the Companion Animal Clinic School of Veterinary Medicine, Aristotle University of Thessaloniki (CAC-AUTH), with depression, fever and anorexia after fall from a low height. Hematological and biochemical profiles were normal. Radiological and ultrasonographic examination identified fluid in the craniodorsal mediastinum and 25ml of sterile hemorrhagic fluid was removed. The hemostatic profile was within normal limits. After fluid removal the dog was clinically normal and discharged without any treatment. Nine months later the dog re-presented to CAC-AUTH with depression and dyspnea after an external pressure applied on the chest. Hematological examination showed a low hematocrit (19%), while biochemical and hemostatic profiles were normal. Radiography and ultrasonography confirmed fluid in the craniodorsal mediastinal space, and 40ml of hemorrhagic fluid was removed. Thoracic computed tomography angiography revealed no other abnormalities.

**Results:** The dog underwent a blood transfusion and received treatment during a three-day clinic stay and after three years remains healthy.

**Conclusions:** Bleeding in the dorsal mediastinal space in healthy dogs may be due to rupture of vessels after application of external pressure on the chest.

**Literature:**

Amalia Agut, Radiology of the mediastinum, WSAVA 2002 CONGRESS

Arimura T., Machida N., Nishida Y., Kiryu K., (1998) Fatal rupture of the brachiocephalic artery in a dog. *Journal of Comparative Pathology* 118, 151-154

Gail D. Manson, Christopher R. Lamb, Richard M. Jakowski, (1990) Fatal Mediastinal hemorrhage in a dog. *Veterinary Radiology & Ultrasound* 31, 214-216

Peak K., Walker D., Agthe P., (2022) Dorsal mediastinal hemorrhage in dogs: 4 cases (2010-2018). *Journal of Small Animal Practice* 63, 62-71





EP09

## TWO CASES OF OCULAR MALIGNANT TUMORS ASSOCIATED WITH CHRONIC OCULAR DISEASE IN CATS

**Barbara Lamagna**<sup>1</sup>, Luigi Navas<sup>1</sup>, Maria Pia Pasolini<sup>1</sup>, Evaristo Di Napoli<sup>1</sup>, Giuseppe Piegari<sup>1</sup>, Dario Basso<sup>1</sup>, Adelaide Greco<sup>2</sup>, Pierpaolo Coluccia<sup>2</sup>, Dario Costanza<sup>2</sup>, Cristina Di Palma<sup>1</sup>, Stefano Cavalli<sup>1</sup>, Francesco Lamagna<sup>1</sup>

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<sup>2</sup> Interdepartmental Centre of Veterinary Radiology "Federico II", University of Naples, Naples – Italy,

**Objective:** To describe two cases of ocular tumors associated with phthisis bulbi and chronic ocular disease in two cats, and to discuss the importance of implementing careful monitoring of eyes affected by chronic inflammation, in order to achieve an early diagnosis and an adequate treatment. Study design Case report

**Materials and Methods:** Two cases of feline intraocular malignant tumor were reported in cats that presented blindness of the affected eye for more than seven years before the tumor development.

**Case 1:** A 15-year-old, spayed female, Domestic Shorthaired cat was evaluated for evaluation of buphthalmia of the right eye (OD), developed in the previous month. When the cat was adopted, at the age of two months, the OD was blind, microphthalmic and hypotonic. An orbital exenteration of the affected eye was performed. The histopathology of the lesion and the positivity by immunohistochemistry of the neoplastic cells for S100 and Melan confirmed the diagnosis of primary iris melanoma. Six months later orbital neoplasia recurred, and the cat was euthanized and a complete necropsy was performed showing regional lymph nodes, lung, liver and kidneys metastases.

**Case 2:** A 8-year-old, spayed male, Domestic Shorthaired cat was presented for evaluation of an orbital neoplasia developed after an exenteration of the OD, that had a sudden perforation. The owner reported that the OD was buphthalmic and blind since adoption, at the age of two months. A whole-body Computed Tomography (CT) was performed using a multidetector device. CT images showed complete alteration of the right orbit characterized by swelling of the soft tissues, mainly represented by hypoattenuating and non-enhancing areas with few air bullae entering from an ulcerated skin lesion, surrounded by an irregularly septet enhancing capsule, thicker in the medial orbital cavity, and involving ventrally the masseter muscles and the medially the temporo-mandibular joint. There was associated lysis of the lacrimal and frontal bones with the right caudo-dorsal nasal cavities and frontal sinuses filled by dense, slightly contrast-enhancing tissue. The right mandibular and retro-pharyngeal lymph nodes were slightly enlarged but with normal contrast enhancement. No other abnormalities were detected. After the CT, an ultrasound-guide biopsy was performed. Histopathology confirmed the diagnosis of a giant cells sarcoma and the cat was euthanized.

**Discussion:** To our knowledge, this is the second reported case of ocular melanoma associated with phthisis bulbi in cats. We reported a previous case that showed a very aggressive behavior in a 13-year-old cat (1). Numerous reports of cases of feline ocular post-traumatic sarcomas (FOPTS) sarcoma have been published. Authors described these tumors as a very aggressive type of ocular cancer that occurs in cats with a history of trauma or severe intraocular disease (2).

**Conclusions:** Ocular tumors are uncommon in cats, but they can be life-threatening for the affected animal. Phthisis bulbi and buphthalmos, are final stages of a severe eye inflammation and in most cases are unmonitored because the affected eye is blind and





does not cause painful manifestations. However, this report shows that monitoring or enucleation of eyes with chronic inflammation should be considered as an early approach in cats to prevent malignant tumors.

**Literature:**

Iris melanoma associated with unilateral phthisis bulbi in a 13-year-old domestic shorthair female cat. Barbara Lamagna et al. *Vet Q.* 2019; 39(1): 131–135.2)

Feline ocular post-traumatic sarcomas: Current understanding, treatment and monitoring Carrissa Wood, Erin M Scott *J Feline Med Surg.* 2019 Sep;21(9):835-842.





## EP10

### PRESUMED PRIMARY IMMUNE-MEDIATED NEUTROPENIA WITH SPONTANEOUS REMISSION IN A DOG

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**Objectives:** To report on the clinical presentation, diagnostic approach, and the unusual outcome of a dog with presumed primary immune-mediated neutropenia (IMN).

**Methods:** A six-year-old Cane Corso was admitted with a history of anorexia, pyrexia and severe neutropenia for the last 24 hours. The dog was up to date with vaccinations and antiparasitic prophylaxis and had no prior drug exposure. Physical examination revealed fever (40.80C), tachypnea, ptyalism and a systolic, grade II heart murmur. Initial major differentials included bacterial endocarditis, sepsis, vector-borne infections and IMN.

**Results:** Complete blood count (CBC) indicated severe neutropenia (0.3 k/ $\mu$ L) and mild thrombocytopenia, confirmed by blood smear examination. Blood serum biochemistry, urinalysis and thoracic/abdominal radiographs were unremarkable. Ultrasound-guided fine needle cytology of the mildly enlarged spleen, mesenteric and iliac lymph nodes, as well as cerebrospinal and joint fluid cytology were unrewarding. Echocardiography indicated mild pulmonary stenosis and no lesions consistent with endocarditis. Blood and urine cultures were negative. Point-of-care serology for endemic vector-borne canine infections (ehrlichiosis, anaplasmosis, dirofilariosis, leishmaniosis) was negative, while blood PCR was negative for Bartonella spp. and Babesia spp. Bone marrow aspiration cytology revealed neutrophilic lineage maturation arrest and occasional phagocytosed neutrophils. Empiric treatment with ampicillin and enrofloxacin was administered. Resolution of fever and neutropenia occurred 5 hours after the initiation of antibiotics, followed by a relapse of neutropenia along with fever 8 days later (while the dog was on the antibiotic treatment), which spontaneously resolved without further treatment within 5 days. As of this writing, 6 weeks after remission, the dog has an excellent quality of life with normal CBC.

**Conclusion:** Primary immune-mediated neutropenia is usually a diagnosis of exclusion, after a comprehensive diagnostic work rules out more common causes. Although immunosuppressive treatment is the standard of care for canine IMN, spontaneous hematologic remission may rarely occur.





## EP11

### EROSIVE IMMUNE-MEDIATED POLYARTHRITIS IN FOUR MALTESE DOGS

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**Objectives:** To describe erosive immune-mediated polyarthritis (eIMPA) in 4 Maltese dogs.

**Methods:** The medical records of a Veterinary Teaching Hospital (2021-2024) were retrospectively reviewed and dogs with IMPA were identified. Dogs were classified as having eIMPA if radiographic evidence of erosive arthritis was endorsed by a board-certified radiologist. Synovial fluid cytologic examination and culture from multiple joints were performed in all dogs. Non-joint inflammatory diseases were excluded via clinicopathologic testing, diagnostic imaging and serologic testing for endemic vector-borne pathogens.

**Results:** Thirteen dogs were diagnosed with IMPA, of which 4 (31%) met the criteria for eIMPA. All dogs with eIMPA were of the Maltese breed, including 1 male and 3 females, with a median age of 8 years. None of the dogs with non-erosive IMPA was of the Maltese breed. All Maltese dogs presented lameness, deformation and swelling of the carpal joints on admission. Major radiographic findings included severe pericarpal soft tissue swelling, bone lytic lesions in many joints and collapse of the joint spaces. Synovial fluid cytology and culture indicated non septic purulent arthritis. Two dogs with eIMPA were treated with immunosuppressive doses of prednisolone combined with cyclosporine with marked improvement in lameness and synovial fluid cytology, whereas a third dog was treated with leflunomide with minimal improvement. No treatment was undertaken in the fourth dog due to the guarded prognosis.

**Conclusion:** To the authors' knowledge, this report describes the first case series of eIMPA affecting Maltese dogs. Combined immunosuppressive treatment may provide a favorable prognosis.

#### **Literature:**

Ralphs SC, Beale BS, Whitney WO, Liska W. Idiopathic erosive polyarthritis in six dogs (description of the disease and treatment with bilateral pancarpal arthrodesis). *Vet Comp OrthopTraumatol* 2000,13:191-196.

Shaughnessy ML, Sample SJ, Abicht C, Heaton C, Muir P. Clinical features, and pathological joint changes in dogs with erosive immune-mediated polyarthritis: 13 cases (2004-2012). *J Am Vet Med Assoc* 2016,249:1156-1164.





## EP12

# DIAGNOSTIC APPROACH AND TREATMENT PLAN OF AUTOIMMUNE POLYENDOCRINE SYNDROME (APS-TYPE II): CONCURRENT HYPOADRENOCORTICISM AND HYPOTHYROIDISM IN A CANINE PATIENT

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<sup>2</sup>Private Practitioner

**Objectives:** The aim of this case report is to present initial stabilization and diagnosis of a dog with concurrent hypoadrenocorticism and hypothyroidism (autoimmune polyendocrine syndrome; APS-TYPE II), as well as the pitfalls to avoid when contemporaneously treating and monitoring both disorders.

**Methods:** A six-year-old, female spayed, mixed breed dog presented with a history of lethargy, selective appetite, weight gain and intermittent vomiting. Upon clinical examination, slightly pale oral mucous membranes, borderline hypotension and non-pruritic symmetrical hypotrichosis were noted. CBC and serum biochemistry revealed mild anemia and moderately elevated creatinine, while SDMA was within normal ranges. Abdominal ultrasound findings included hepatomegaly with diffuse parenchymal hyperechogenicity, bilaterally decreased adrenal size and a small amount of gallbladder sludge. The ACTH stimulation test for serum aldosterone and cortisol was diagnostic of hypoadrenocorticism. Prednisolone was introduced at 0.25mg/kg SID PO along with desoxycortone pivalate at 1.5mg/kg SC, with subsequent dosage changes based on electrolytes monitoring. On follow-ups, clinical signs resolved, but symmetrical hypotrichosis and anemia persisted, as well as a delayed hair regrowth after clipping for medical reasons. Hair growth cycle disruption due to another hormonal disease was top listed after excluding common dermatopathies.

**Result:** Low tT4 (<0.12µg/dl) and free-T4 (<4pmol/l), and high cTSH (1.5ng/ml) concentrations were suggestive of hypothyroidism. Thyroid ultrasonography revealed hypoechogenicity of the thyroid gland with reduced thyroid to common carotid artery surface ratio (1.085) and reduced total thyroid volume (134.25mm<sup>3</sup>). Levothyroxine (0.02mg/kg BID PO) was introduced. On follow-ups, clinical signs improved gradually and serum tT4 and cTSH concentrations were within reference ranges.

**Conclusions:** APS is a rare systemic disorder characterized by immune mediated target-organ destruction processes, attributed to the presence of circulating autoantibodies and lymphocytic infiltration. Hypoadrenocorticism coexisting or being followed by hypothyroidism, although rare, should be carefully prioritized, as treating the later without stabilizing electrolytes, could potentially lead to Addisonian crisis.





## EP13

### PANCREATIC ABSCESS IN A DOG WITH JUVENILE DIABETES MELLITUS: ULTRASOUND-GUIDED DRAINAGE AND MEDICAL MANAGEMENT

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**Objectives:** To describe a rare case of juvenile diabetes mellitus accompanied by the presence of a pancreatic abscess, treated with percutaneous ultrasound-guided drainage and medical management.

**Methods:** A five-month-old, female, mixed-breed dog was referred at a Veterinary Teaching Hospital, with a recent diagnosis of diabetes mellitus. On presentation, the dog had poor body condition score, delayed growth, pale oral mucous membranes, weak pulse, and prolonged capillary refill time.

**Results:** Complete blood count indicated mild anemia, marked neutrophilic leukocytosis with a regenerative left shift. Abnormal serum biochemistry values included hyperglycemia, increased serum ALT and  $\gamma$ -GT activity, hypocalcemia, hyponatremia, high concentration of fructosamine, glycated hemoglobin A1C and b-hydroxybutyrate acid, while acid-base balance was not disturbed. Canine specific pancreatic lipase was within reference intervals. Urinalysis revealed glycosuria and ketonuria. Initial stabilization included supportive care, empiric treatment with ampicillin and marbofloxacin and continuous rate infusion (CRI) of regular insulin. Abdominal ultrasonography revealed a hypoechoic oval 'cystic' structure (2x1.2x1cm) in the pancreatic body, with thick wall and echogenic material. Other findings included hepatomegaly with diffuse hyperechogenicity and cholelithiasis with small amount of biliary sludge. Ultrasound-guided drainage of the pancreatic 'cystic' lesion was performed with a 22-Gauge needle and about 2 ml of pale pink fluid was aspirated, with no complications. Cytological examination indicated pyogranulomatous inflammation with predominantly degenerate neutrophils and occasionally activated macrophages, while culture yielded negative results, possibly due to previous antibiotic administration. After the resolution of laboratory abnormalities, the dog was discharged with intermediate-acting, lente insulin. Follow-up ultrasonographic monitoring continued for 1 month without any signs of recurrence, while good control of diabetes was maintained six months after the discharge. Conclusions To the authors' knowledge, this is the first report of a pancreatic abscess in a juvenile dog with diabetes mellitus managed successfully with a combination of medical treatment and percutaneous ultrasound-guided drainage.

#### Literature:

Anderson JR, Cornell KK, Parnell NK, Salisbury SK. Pancreatic abscess in 36 dogs: a retrospective analysis of prognostic indicators. J Am Anim Hosp Assoc. 2008 44(4); p.171-179

Coleman M., Robson M. Pancreatic Masses Following Pancreatitis: Pancreatic Pseudocysts, Necrosis, and Abscesses Compendium on Continuing Education for the Practicing Veterinarian - North American Edition 2005 27(2); p.147-153

Lee M, Kang JH, Chang D, Na KJ, Yang MP. Pancreatic abscess in a cat with diabetes mellitus. J Am Anim Hosp Assoc. 2015 51(3); p.180-184







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Talbot CT, Cheung R, Holmes EJ, Cook SD. Medical and surgical management of pancreatic fluid accumulations in dogs: A retrospective study of 15 cases. J Vet Intern Med. 2022 36(3); p.919-926





## EP14

### FELINE LEISHMANIOSIS WITH FOCUS ON OCULAR MANIFESTATION: A CASE REPORT

**Theresa Marquar**<sup>1</sup>, Ingo Schäfer<sup>1</sup>, Albert Schmidt<sup>2</sup>, Fritz Gräber<sup>2</sup>, Andrea Schieszler<sup>3</sup>, Heike Aupperle-Lellbach<sup>1</sup>, Gerhard Loesenbeck<sup>1</sup>, Michaela Gentil<sup>1</sup>, Elisabeth Müller<sup>1</sup>, Torsten J Naucke<sup>1</sup>

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**Introduction:** There is limited knowledge regarding pathogenesis, ocular manifestations, and long term follow up in cats with leishmaniosis.

**Case description:** A cat imported from Spain to Germany was presented with lethargy, weight loss, ulcerative lesions on the limbs, and high-grade uveitis after local glucocorticoid therapy due to respiratory disease. The diagnosis of *L. infantum* infection was based on cytological findings of amastigotes in skin lesions, positive qPCR of EDTA-blood, and positive PCR of a cyto-brush sample from the conjunctiva. Supportive findings included positive serology. Hematological and biochemical results at first presentation revealed mild leukocytosis with lymphocytosis, monocytosis, and eosinopenia as well as marked elevation of Serum Amyloid A (SAA) and hyperglobulinemia. In serum protein electrophoresis, peaks in alpha2- and gamma-globulin sections were detected. FeLV-antigen and FIV-antibody testing were positive. Treatment with allopurinol resulted in remission of clinical signs. Enucleation had to be performed on day 288 on both eyes due to refractory glaucoma and uveitis. The cat was already blind before enucleation. On histologic examination, high numbers of *Leishmania* spp. amastigotes were found in histiocytes. Serology and PCR were positive in the aqueous humor of both eyes.

**Conclusion:** This case report supports the hypothesis that immunosuppression increases the risk of clinical signs of leishmaniasis in cats. Alpha 2- and gamma-globulin peaks in electrophoresis showed to be supportive criteria for the diagnosis of feline *L.infantum* infection. SAA is valuable for monitoring. For the first time *Leishmania* IgG-antibodies were demonstrated in the aqueous humor in cats. Regarding ophthalmology, uveitis and glaucoma may have a poor prognosis.





EP15

## A CASE OF BI-CAVITARY IDIOPATHIC CHYLOTHORAX AND CHYLOABDOMEN IN A CAT

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**Case description:** A 13-year-old neutered female Russian Blue cat with outdoor access, was presented with a three-week history of abdominal distention and reduction in activity levels. Clinical examination prior to referral had identified a restrictive breathing pattern and abdominal distension. Blood tests had identified hypoproteinaemia (53 g/l (56-81)) with low-normal albumin (26 g/l (26-42)) levels. Cytological analysis of abdominal and thoracic fluid was compatible with chylous effusion (pleural fluid triglycerides 11.1 mmol/L, peritoneal fluid triglycerides 8.5 mmol/L (concentrations greater than 1.1 mmol/l indicative of a chylous effusion)). On presentation, the patient was mildly hypoalbuminaemic (23 g/l (26-42)). Echocardiography was normal. CT of the thorax and abdomen, complimented with ultrasound, revealed mild pleuritis, pancreatitis, a heterogenous spleen, and intraluminal small intestinal structures thought to represent parasites. The patient had right renomegaly and markedly reduced left kidney size. Repeated cytological analysis of thoracic and abdominal fluid did not reveal evidence of neoplasia, infection or inflammation. Cytology of the spleen did not show evidence of cancer. FeLV/FIV testing was negative. A presumptive diagnosis of idiopathic bi-cavitary chylous effusion was made. The cat was prescribed prednisolone (1mg/kg/24hrs), rutin (50mg/kg/8hrs), medium-chain triglycerides (1ml/kg/24hrs), and a low-fat diet. Therapeutic thoracocentesis and abdominocentesis was repeated 17 days later. Euthanasia was elected due to a poor clinical response. Post-mortem examination confirmed the diagnosis of idiopathic bi-cavitary chylous effusion.

**Conclusion:** To the authors knowledge, this is the first report of confirmed bi-cavitary idiopathic chylous effusion in a cat.





## EP16

### COMPARATIVE IMPACT OF GABAPENTIN AND ALPRAZOLAM ON VENOUS CATHETERIZATION DIFFICULTY AND PROPOFOL REQUIREMENTS FOR TRACHEAL INTUBATION IN CATS

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**Objectives:** Stress may adversely affect cats admitted in or hospitalized in veterinary clinics, which justifies the use of anxiolytic medications, like gabapentin and alprazolam. The objective of the study was to evaluate the difficulty in venous catheterization (VC) in cats that had been treated with gabapentin, alprazolam or placebo, 2 hours before they were premedicated with acepromazine and buprenorphine. In addition, to evaluate the dose of propofol required to intubate the cats.

**Methods:** Sixty female cats admitted for elective surgery, were included in the study. Cats weighed over 3 kg, were at least 6 months old, and were randomly allocated into three groups: Group G (n=20) cats received 100 mg per cat of gabapentin. Group A (n=20) cats received 0.125 mg per cat of alprazolam. Group P (n=20) cats, received a placebo medication. Two hours after treatment, all cats were premedicated with intramuscular acepromazine (0.02 mg/kg) and buprenorphine (0.02 mg/kg). Twenty-five minutes after sedation, the cats' sedation levels were assessed using the Volpato Sedation Score. Subsequently, the difficulty of VC was evaluated based on the animals' responses ranging from 0 (no reaction) to 3 (strong resistance). The dose of propofol required to achieve endotracheal intubation was also measured.

**Results:** Difficulty in VC insertion was not significantly different among the groups ( $P = .310$ ). The propofol dose required to achieve tracheal intubation was significantly less in Group A compared to Group G ( $P = .01$ ) and P = .00 respectively). There was non-significant difference between Groups G and P ( $P = .10$ ).

**Conclusions:** While the use of anxiolytics did not affect the difficulty of VC insertion, alprazolam significantly reduced the dose of propofol needed for tracheal intubation in cats.

#### **Literature:**

Chen YK, Soens MA, Kovacheva VP. Less stress, better success: a scoping review on the effects of anxiety on anesthetic and analgesic consumption. *J Anesth.* 2022 Aug;36(4):532-553. doi: 10.1007/s00540-022-03081-4

Erickson A, Harbin K, MacPherson J, Rundle K, Overall KL. A review of pre-appointment medications to reduce fear and anxiety in dogs and cats at veterinary visits. *Can Vet J.* 2021 Sep;62(9):952-960

Hudec CP, Griffin CE. Changes in the stress markers cortisol and glucose before and during intradermal testing in cats after single administration of pre-appointment gabapentin. *J Feline Med Surg.* 2020 Feb;22(2):138-145. doi: 10.1177/1098612X19830501





## EP17

### IMMUNE MEDIATED THROMBOCYTOPENIA AND URINARY TRACT INFECTION MIMICKING BLADDER NEOPLASIA IN A DOG

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**Objective:** Immune mediated thrombocytopenia (IMTP) is an autoimmune disorder and can be primary or secondary. Urinary infection has not been established as a trigger factor for IMTP in veterinary literature although there are several reports in human medicine. We present a case of IMTP presumptively secondary to urinary infection with ultrasonographical image of neoplasia.

**Methods:** A 16-year-old, spayed female, Jack Russel Terrier was presented with hematuria the last 24 hours. Treatment with enrofloxacin was already initiated with no resolution of clinical signs. Clinical examination revealed tachypnea, pale mucous membranes and multiple petechiae and ecchymosis on the abdominal skin area. Clinicopathological abnormalities included severe thrombocytopenia (2K/ $\mu$ L), mild increase in ALT and ALP activity, while hemostatic assessment with PT and PTT measurement was normal. Abdominal ultrasonography revealed severe asymmetrical bladder wall thickening, with irregular margins and generalized echogenicity compatible in first hypothesis with infiltrative neoplasia. The dog received a single injection of vincristine.

**Results:** Within 4 days of hospitalization, treatment included enrofloxacin, prednisolone and mycophenolate mofetil, while a complete blood transfusion was performed because of acute anemia on 2nd day. On 4th day, the ultrasonographic appearance of the bladder was vastly improved with only mild asymmetrical wall thickening being observed, while CBC showed an increase on PLTs to 80K/ $\mu$ L. At that time, sedation and catheterization of the dog was performed and mild atypia on uroepithelial cells was noted on urine sediment cytological examination. Urine culture was positive for E. Coli and Enterobacter Aerogenes and on discharge Fosfomycin was added to above medication. One week later, CBC and bladder ultrasonography were normal. Two years after initial presentation the dog remains healthy.

**Conclusions:** Urinary infection can be mimicking bladder neoplasia in ultrasound examination so reevaluation of these patients after eliminating infection is crucial. Urinarytract infection should be considered as potential trigger factor of IMTP.





## EP18

### URINE PROTEIN TO CREATININE RATIO IN YOUNG AND ADULT GUINEA PIGS (*CAVIA PORCELLUS*)

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<sup>2</sup>Department of Pharmacology and Pharmacy

**Objectives:** The urine protein to creatinine ratio (UPC) is a tool for quantifying proteinuria that is routinely used in dogs and cats. Its use in other animal species is currently being investigated. The aim of this study was to compare the UPC in guinea pigs younger than 6 months with that of adult guinea pigs and to assess the development of UPC in 2–4-week-old guinea pigs.

**Methods:** A total of 161 clinically healthy guinea pigs (120 adult and 41 younger animals than 6 months) were included in the study. In all guinea pigs, the urine sample was obtained by spontaneous voiding under standardized conditions by one of the article authors. In 16 young animals, urine was collected repeatedly at 2, 3 and 4 weeks of age.

**Results:** A significantly higher UPC value was found in guinea pigs younger than 6 months than in adult animals (median 1.48 and 0.56, respectively). The resulting UPC value was influenced by a significantly lower creatinine concentration in the urine of the pups (median 0.5 mmol/l and 1.1 mmol/l, respectively) in comparison with adult animals. The protein concentration in the urine did not differ between the groups (median 101.6 mg/l and 98.4 mg/l). When comparing the UPC values of the pups at 2, 3 and 4 weeks of age, no significant difference was found; the protein and creatinine concentrations in the urine did not differ either.

**Conclusions:** The results of this study show that guinea pig pups have higher UPC levels compared to adults. Repeated analyses of urine samples from puppies aged 2-4 weeks showed no changes in the concentration of protein, creatinine and their ratio.

**Acknowledgements:** This study was supported by 2023ITA21 VETUNI





EP19

## NECROTIC VAGINAL PROLAPSE RELATED TO VAGINAL LEIOMYOSARCOMA IN A PUG

**Maroula Papadopoulou**, Martha Tziaki, Eleni Ramantani, Eirini Konstantarou

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**Case description:** The aim of this case is to describe the clinical presentation and the surgical approach of a vaginal prolapse type 3 due to vaginal leiomyosarcoma. Vaginal leiomyosarcoma is a rare tumor with variable presentation and broad differential diagnosis. A 7-year-old, intact female Pug, was referred because of protrusion of a vaginal mass through the vulvar commissure. On clinical examination revealed vaginal prolapse type 3, necrotic part, along with a vaginal originated, irregular, solid mass. Hematologic abnormalities included leukocytosis, neutrophilia and low Hct. The vaginal smear was predominantly made up of parabasal and small intermediate cells (anoestrus). Transabdominal ultrasound revealed no obvious mass or fluid. Animal undergone surgery for necrotic vaginal prolapse (amputation of the prolapsed tract with resection of the vaginal mass) and ovariohysterectomy, and a catheter was placed into the urethra presurgical and remained for 3 days post operative. A histopathological examination of the mass demonstrated that it was leiomyosarcoma which appeared to have been completely excised with narrow margins. 4 months later, the bitch presented to our clinic with no sign of recurrence and hematological analyses were through the limits. Treatment should be planned quickly so as to achieve local tumor control as leiomyosarcomas are uncommon tumours that tend to be locally infiltrative but are only occasionally metastatic.

**Literature:**

R. Bucci, J. Fussi, D. Robbe, M. Veronesi, A. Carluccio. Management of Vaginal Hyperplasia in Bitches by Bühner Suture. *Animals*. 2022. 12(24),3505; <https://doi.org/10.3390/ani122435052>.  
C. Thacher, R. Bradley. Vulvar and vaginal tumors in the dog: a retrospective study. *J Am Vet Med Assoc*. 1983. 15;183(6):690-2





EP20

## LEFT-SIDED ATRIAL SEPTAL POUCH IN DOGS AND CATS – A PRELIMINARY STUDY

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**Objectives:** Left-sided atrial septal pouch (SP) is an anatomical entity reported for the first time in 2006. Since then, it has been described in humans, sheep and pig but no studies have been conducted on dogs or cats. In humans the link between SP and an increased risk of ischemic stroke resulting from left-atrial thrombus formation has been discussed. As cats are predisposed to the aortic thromboembolic disease following left-atrial thrombi development, the occurrence and morphology of SP in that animal species and comparison with dogs may be an interesting starting point for further studies.

**Methods:** The study was conducted on hearts obtained post-mortem from 24 randomly chosen dogs (46% males) and 24 randomly chosen cats (50% males). Each heart was weighted, fixed in formalin, sectioned and the SP area was examined. The orifice width and SP depth was measured. When present, SP was subjected to histological analysis using standard method of slide preparation and HE staining.

**Results:** Left-sided SP was present more common in cats than in dogs ( $p=0.04$ ). Although the orifice diameter and SP depth has shown no differences between cats and dogs ( $p>0.05$ ), when related to heart mass, the feline SP showed higher values of both orifice diameter and SP depth than dogs ( $p<0.0001$ ). The histological examination of SP showed that in cats the structure comprises of transverse muscle fibers covered with endocardium, similarly to human, pig and sheep, while in dogs also longitudinal and oblique muscle fibers were present.

**Conclusions:** Left-sided septal pouch is present in both dogs and cats with higher frequency noted in the latter. The differences in the relative size of SP and histological structure should be further studied in relation to the possibility of thrombus formation and predisposition to aortic thromboembolism in cats.







## EP21

### DEPLOYMENT OF THE COLLABORATIVE INVESTIGATION “CHECK & PROTECT” IN GREECE: SCREENING OF DOGS AND KNOWLEDGE OF PET OWNERS ABOUT CANINE VECTOR-BORNE DISEASES

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**Objectives:** Efforts to fight against the ongoing spread of vector-borne diseases (VBDs) are required. With this objective, the collaborative field research “Check & Protect” was carried out in Italy (Campania region), Spain and Romania in 2023. The main objective of the study is to assess the awareness and knowledge about the prevention of VBDs. The first results showed the importance of screening regularly healthy-looking dogs and educating pet owners.

**Methods:** The study started in Greece in April 2024 in collaboration with 30 veterinary clinics enrolling 300 canine cases. Each clinic was asked to enroll ten healthy-looking dogs. Each dog was screened using a rapid ELISA test (Uranotest® Quattro) targeting 4 pathogens: *Dirofilaria immitis*, *Leishmania infantum*, *Ehrlichia canis*, *Anaplasma* spp. The practitioners completed a clinical case form for positive cases which were complemented by further analysis. The pet owner filled a consent form and a “knowledge” questionnaire about VBD. All the positive cases were implemented in a real-time map ([www.mvbdmap.com/en](http://www.mvbdmap.com/en)).

**Results:** The study is still running at present and will be terminated in June 2024. At this stage, 96 dogs were screened and 10 were positive to at least one VBD. The results will provide insights into the epidemiology current state in Greece. Moreover, the pet owner awareness and knowledge will be assessed, allowing to better design future educative tools.

**Conclusions:** The results already highlight the importance of screening regularly healthy-looking dogs to prevent the onset of an infection and potential VBD spread. The pet owner's knowledge assessment will be key to select the most appropriate communication for improved prevention and surveillance. In the future, “Check & Protect” should include other VBDs and be deployed in other territories. The more we know, the better we can fight.

**Acknowledgments:** The authors acknowledge Urano labs and all the veterinary clinics involved.





## EP22

### DIAGNOSTIC METHOD OF DERMATOPHYTOSIS IN CAT SHELTER ENVIRONMENT

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**Introduction:** The issue of infectious diseases in shelters is complicated. The situation in shelters is complicated by overcrowding and lack of funds. A common disease in cat shelters is dermatophytosis caused by *Microsporum canis*. Lack of funds in shelters complicates early diagnosis and possible treatment. The diagnostic standard is usually the cultivation of samples on Sabouraud's agar, or the use of Dermatophyte test media. Unfortunately, these methods have disadvantages, both time and financial demands. One possible solution is the usage of Wood's lamp.

**Objective:** The research focuses on comparing the effectiveness of examination using Wood lamp and cultivation on Sabouraud agar. This work's main goal is to determine the ability of Wood's lamp to diagnose dermatophytosis caused by *Microsporum canis* and to limit its transmission to the shelter.

**Method:** All cats in the shelter at the time were examined. A total of 70 cats were examined using both Wood's lamp and culture. Samples for culture examination were procured using the Mackenzie brushing method. The grown colonies were microscopically examined.

**Results:** The prevalence of *Microsporum canis* was 64.29%. In the 48.57% cases showed positive fluorescence with the use of a Wood lamp. Wood lamp examination showed 71% sensitivity and 92% specificity. Among cultivation and Wood lamp examination, there was no observed significant statistical difference, neither in all cats ( $p = 0.088$ ), nor in the cats with clinical signs ( $p = 0.163$ ). A statistically significant difference was observed in the examination of cats that did not show clinical signs ( $p = 0.005$ ).

**Conclusion:** The results of this work suggest that the use of Wood lamp is an initial cheap and rapid screening method that has its place in shelters



## Oral Abstracts

### ΠΑ01

#### THE EFFECT OF THE OESTRUS CYCLE STAGE, GESTATION AND LACTATION ON THE RED BLOOD CELL PARAMETERS

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**Introduction:** There are no thorough studies dealing with the effect of oestrus cycle stages, gestation and lactation on the erythrocyte parameters.

**Objective:** The study scope was to highlight any alterations noticed in all these stages.

**Method:** Red blood cell (RBC) parameters (RBC, HCT, HGB, MCV, MCH, MCHC, RDWCV) were studied (ADVA 120, Siemens) in 140 healthy bitches (immature n=5, oestrus n=6, early dioestrus n=24, late dioestrus n=14, anoestrus n=58, early gestation n=15, late gestation n=10, lactation n=8) brought into the Aristotle University Companion Animal Clinic.

**Results:** Mean HCT and HGB values during anoestrus ( $49.4 \pm 6.03\%$ ,  $16.6 \pm 1.83$  g/dL) were significantly higher than those in late dioestrus ( $45.2 \pm 5.34\%$ ,  $15.13 \pm 1.88$  g/dL,  $p < 0.05$ ), early gestation ( $40.5 \pm 6.75\%$ ,  $13.8 \pm 2.36$  gr/dL,  $p < 0.001$ ), late gestation ( $35.5 \pm 4.57\%$ ,  $12.1 \pm 1.61$  g/dL,  $p < 0.001$ ) and lactation ( $43.3 \pm 7.30\%$ ,  $13.9 \pm 2.93$  p < 0.01). Additionally, significant differences of mean HCT and HGB values were identified between late gestation and all other groups ( $p < 0.05$ ), as well as between the early gestation group and all other groups ( $p < 0.05$ ) except for the immature one. Considering RDWCV, statistically significant difference was detected between the late gestation ( $14.1 \pm 1.0\%$ ) and the anoestrus group ( $13.3 \pm 0.8\%$ ,  $p < 0.05$ ).

**Conclusions:** The maximum values of HCT and HGB and the lowest RDWCV are noticed during anoestrus, whereas the minimum values of HCT and HGB and the highest RDWCV are identified during late gestation. The oestrus cycle stages seem to affect these parameters with low divergence from normal reference values. Gestation significantly affects erythrocyte parameters, probably due to haemodilution.





ΠΑ02

## ACQUIRED PYLORIC STENOSIS ASSOCIATED WITH A SINGLE ACCIDENTAL HIGH DOSAGE OF MELOXICAM INGESTION IN A FEMALE MIXED BREED YOUNG ADULT DOG

**Vassiliki Stathopoulou**<sup>1</sup>, Efstathios Roubeas<sup>2</sup>, Ioannis Paratsokas<sup>3</sup>, George Polyzois<sup>4</sup>, George Dourdass<sup>5</sup>, Christos Kotopoulos<sup>6</sup>

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**Introduction:** Pyloric stenosis is a common cause of mechanical gastric outflow obstruction. It can be caused by hypertrophy of the circular muscle of the pylorus, by hyperplasia of the antropyloric mucosa or a combination of both. Chronic hypertrophic pyloric gastropathy (CHPG) may be congenital or acquired. Acquired CHPG affects predominately adult to mature brachycephalic or other small breeds and any breed with chronic gastritis, chronic active inflammation or gastric ulcers. Hypergastrinemia, acute stress and changes in the myenteric plexus leading to chronic antral distension may contribute to the etiopathogenesis. Clinical symptoms include intermittent vomiting, many hours after the meal that progress into projectile vomiting with increased frequency as the outflow obstruction deteriorates. Positive-contrast radiographic studies, ultrasonography and endoscopy are a cornerstone for the diagnosis. Surgical pyloroplasty is the treatment of choice.

**Case description:** A 12-months old intact female mixed breed dog was presented with a 2 weeks history of persistent projectile vomiting, a few hours after feeding, unresponsive to common antiemetic treatment and dietary measures. Clinical history revealed a single accidental ingestion of high dosage of meloxicam two weeks prior admission, with predominant clinical symptoms of hematemesis, melena, severe depression, abdominal pain and severe anemia (HCT 16%). The patient was hospitalized for 5 days and had undergone a blood transfusion. Clinical examination findings recorded a body condition score 1/9, moderate muscle loss, dehydration (7%), pale mucous membranes and a mildly increased heart rate. Abdominal palpation elicited pain at the cranial abdomen. Hematology revealed moderate pre-regenerative hypochromic anemia, band neutrophilia, while serum biochemistry detected hypokalemia. Barium contrast study confirmed a pronounced delayed gastric emptying. Abdominal ultrasound depicted multifocal gastropathy, active gastric ulceration, duodenitis and lymphadenopathy of the pancreatic lymph node. Gastroscopy identified gastric hypomotility and retention of significant amount of partially digested food in the stomach, diffuse patchy gastritis with erosions and oedema, an overfolded pyloric sphincter, while the passage to the duodenum was not feasible due to severe stenosis of the pyloric orifice. Histopathology demonstrated a diffuse hypertrophy of the inner circular smooth muscle layer of the antrum, secondary to the ulceration induced by the NSAIDs ingestion. Surgical treatment with Y-U pyloroplasty led to an uneventful recovery.

**Conclusion:** Even a single consumption of meloxicam at high dosages may cause pyloric stenosis.





ΠΑ03

## BALLOON DILATION OF NASOPHARYNGEAL STENOSIS ASSOCIATED WITH CHRONIC UPPER RESPIRATORY INFLAMMATION IN A YOUNG INTACT MALE CAT

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**Introduction:** Nasopharyngeal stenosis is a rare condition, most commonly observed in cats rather than dogs. It could be congenital (nasal choanae atresia) or acquired, attributed to inflammatory processes related to:

- Chronic vomiting or regurgitation
- Chronic rhinitis from infectious causes
- Neoplasia/polyps or surgical interventions in the nasopharynx

The main symptoms include:

- Noisy stertorous breathing
- Dysphagia, difficulty swallowing
- Weight loss
- Dyspnoea, cyanosis, open mouth breathing

Differential diagnoses include nasopharyngeal polyps, chronic rhinosinusitis, upper respiratory tract infections and nasal/nasopharyngeal foreign bodies. Non-invasive treatment options include forceps dilation, bougienage and balloon dilation, as well as placement of nasopharyngeal stents. Surgical treatments have also been described, including surgical excision of fibrotic tissue or a mucosal advancement flap.

**Case description:** A European Domestic shorthair intact male cat, 8 months old, presented with symptoms of noisy breathing and reverse sneezing for the past two months, poorly responsive to azithromycin and pradofloxacin. Previous clinical history, at the age of 4 months, included a diagnosis of presumptuous upper respiratory infection, treated with famciclovir, L-lysine and doxycycline, with no laboratory confirmation of any infectious agents. Simultaneously, bilateral eye enucleation was performed. Clinical examination revealed significant weight loss and moderate loss of muscle mass. Evaluation of nasal passage patency by misting on mirror or glass slide was abnormal. Haematology revealed mild eosinophilia, while serum biochemistry was normal. Diagnostic orthograde rhinoscopy using a rigid endoscope (Wisap GmbH, 30 0 , 2.7 mm, 18 cm) and biopsy procurement were performed. Histopathological examination yielded chronic moderate lymphoplasmacytic/neutrophilic rhinitis with turbinate bone remodelling. PCR examination in the submitted nasal tissue for viral or fungal components was negative. Nasopharyngeal stenosis was dilated using a flexible endoscope (AOHUA, 3.5 mm, 60 cm) introduced trans orally with 180 0 retroflexion into the nasopharynx. A guidewire (Dreamwire, Boston Scientific 0.35" 2.60 cm) was placed in the right nostril, caudally through the nasopharynx into the common pharynx where the distal tip was grasped with forceps, and brought out via the oral cavity. A triple expansion balloon dilation catheter (Changmei Medtech:12-13,5-15 mm) was placed over the guidewire such that it passed through the mouth and



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into the stricture. A single dilation session was performed. Amoxicillin-clavulanate, meloxicam, and soft diet were administered for one-week post-dilation.





**Conclusion:** Endoscopic dilation of nasopharyngeal stenosis using balloon dilation is a safe, minimally invasive, and effective method. **ΠΑ04**

## **AGGRESSIVE CD4-CD8-, T-CELL NEOPLASIA, IN A 11 MONTH ENGLISH BULLDOG, CASE REPORT**

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**Introduction:** An estimated 30%–40% of leukemia/lymphomas known to occur in dogs, are of the T-cell phenotype. Currently, the most described commonly types of canine T-cell lymphoproliferative neoplasia in the blood are CD8+ T-cell leukemia and T-zone disease, which are readily diagnosed by flow cytometry.

**Case description:** 11 months old, female, untouched, English Bulldog was admitted with a 1-week history of vomiting, hyporexia and depression. On clinical examination fever and no peripheral lymphadenopathy were noticed. Systemic evaluation included hemogram, serum biochemical profile, urinalysis that revealed severe leukocytosis-lymphocytosis, severe thrombocytopenia, increased activity of ALT, ALP,  $\gamma$ -GT and hyperbilirubinemia. Blood smear and flow cytometry demonstrated an expansion of T-cells that expressed the pan T-cell surface antigens CD3 and CD5, but not subset antigens CD4 or CD8, and low levels of class II MHC. The neoplastic lymphocytes were defined as small in size and described cytologically as small to intermediate with condensed chromatin. Tumor staging encompassed imaging (thoracic radiography and laterolateral and craniocaudal radiography) and ultrasound guided aspirates of the enlarged, liver and spleen that revealed an infiltration of both organs by a predominant population of small lymphocytes. Differential diagnosis based on cytology alone included chronic lymphocytic leukemia (B-CLL) that is considered an indolent disease and polyclonal B-cell lymphocytosis of English bulldogs (PBLEB), a recently described non-neoplastic disease of predominantly young, male English bulldogs, but the aggressivity of the disease could not be related. The patient treated with asparaginase and CHOP with very poor results.

**Conclusion:** From collected data, this case is the youngest patient with acute disease, related with an aggressive immunophenotype. A striking feature of this disease is the mismatch between the morphologic appearance of the circulating lymphocytes, small in size, as determined by cytology alone and the aggressive biologic behaviour.





ΠΑ05

## USE OF OCTREOTIDE FOR THE TREATMENT OF REFRACTORY PROTEIN-LOSING ENTEROPATHY IN TWO DOGS.

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**Introduction:** Protein-losing enteropathy (PLE) is a clinical syndrome characterized by hypoalbuminemia (occasionally pan-hypoproteinaemia), chronic diarrhoea, ascites, peripheral oedema and a predisposition to hypercoagulability. In the gastrointestinal tract, it occurs secondary to chronic inflammatory enteropathy, intestinal lymphangiectasia or intestinal lymphoma. Therapeutic approach comprises of addressing the underlying cause, managing PLE complications, dietary measures, corticosteroids, immunosuppressive agents and supportive care. Despite treatment with the standard of care regimes, 50% of dogs will remain unresponsive. Octreotide is a somatostatin analogue that has been used in a few case series in dogs with refractory PLE.

**Case descriptions:** A 9-year-old male neutered English Setter presented with a history of chronic mixed origin diarrhoea, intermittent vomiting, anorexia and weight loss. Two years prior admission the dog had undergone a full haematology, biochemistry and faecal examination, along with upper and lower gastrointestinal endoscopy. At both initial and latest admission, the patient exhibited ascites, severe panhypoproteinaemia, hypocholesterolemia and a pronounced hypocobalaminemia. Abdominal ultrasound reported peritoneal effusion, small intestine hyperechoic mucosal striations, mucosal thickening and mesenteric lymphadenopathy. A 18-month-old male intact French Bulldog was admitted with rectal prolapse, severe weight loss and chronic mixed origin intermittent haemorrhagic diarrhoea from the age of 4 months. Haematology and biochemistry yielded anaemia and hypoalbuminemia. During colopexy, full thickness biopsies were procured from the gastrointestinal tract and the mesenteric lymphnodes. Both cases had been diagnosed endoscopically with PLE, on grounds of mixed but predominately lymphocytic inflammatory bowel disease and secondary lymphangiectasia with endoscopic and full thickness biopsies respectively. Cobalamin supplementation, therapeutic dietary trials with novel protein, as well as administration of immunosuppressive dosages of corticosteroids, initially as a monotherapy and subsequently in combination with cyclosporine and metronidazole failed to improve the faecal score, the clinical indexes (CIBDAI, CCEAI) and the body condition score (BCS) in either case. Initiation of octreotide at 10 µg/kg, SQ, bid in combination with probiotics, cobalamin, vitamin D supplementation and simultaneous gradual reduction of corticosteroids, led to clinical improvement, increase in serum albumins concentration, weight gain and an optimal faecal score. Adverse effects of octreotide were reported in one dog and included dizziness and urgent watery diarrhoea immediately after the first injection. Clinical symptoms remained in remission at the 6-month follow up examination.







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**Conclusion:** Octreotide should be considered as a potential rescue treatment in dogs with refractory to standard treatment PLE.





## ΠΑ06

### A COMPARATIVE APPROACH TO OSTEOARTHRITIS IN CATS AND DOGS

Evangelia Maniaki

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**Introduction:** Osteoarthritis (OA) is a highly prevalent, age-related degenerative joint disease affecting both cats and dogs. There are many similarities and differences in OA presentation, diagnosis, and management for these companion animals. Importantly, OA is a painful condition that significantly reduces the quality of life for cats and dogs. Raising awareness and educating both pet owners and veterinarians on recognizing OA is crucial for early diagnosis and management. Pathogenesis: OA is characterized by the breakdown of synovial joint cartilage. OA can be primary (idiopathic), where the cause is unknown, or secondary, with genetic and non-genetic risk factors contributing to its development.

**Clinical presentation:** Contrary to dogs where lameness is the most cardinal sign of OA, clinical signs in cats are subtler and require careful owner observation. These may include difficulty jumping, reduced activity levels, or decreased grooming. Diagnosis: Diagnosis relies on a combination of owner-reported signs, clinical metrology instruments (LOAD in dogs and FMP in cats), thorough physical examination, and imaging techniques. Management: A multifaceted approach to OA management aims to improve pain control, maintain joint function, and enhance quality of life. Specifically, this includes environmental modification (steps/ramps for easier access to furniture and resources, non-slip flooring), activity modulation (adjusting exercise and play routine), dietary management (weight management, joint supplements), medical management (non-steroidal anti-inflammatory drugs, opioids, monoclonal antibodies), and surgical intervention, as well as other treatments with potential benefits (rehabilitation therapies, acupuncture, stem cell therapy, laser therapy).

**Conclusion:** Early OA diagnosis depends on the ability of veterinarians to confidently recognize the clinical signs, taking into account the differences between the two species. Adopting a comprehensive and multimodal management plan early is crucial for reducing pain and, consequently, improving the quality of life of companion animals.





## Poster Abstracts

3014

### A PILOT STUDY ON THE EFFECTS OF A NOVEL SHAMPOO IN DOGS WITH ATOPIC DERMATITIS

**Sergi Segarra**<sup>1</sup>, Sara Fraça<sup>2</sup>, Daniel Martínez-Puig<sup>1</sup>, António Neves<sup>2</sup>, Roger Sabata<sup>1</sup>

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**Objectives:** shampoo therapy is recommended for canine atopic dermatitis (CAD). The hyaluronic acid-rich glycosaminoglycans (GAGs) matrix ingredient Dermial® and the sphingomyelin-rich lipid extract (LE) Biosfeen® (Bioiberica SAU, Spain) have been shown to provide skin health benefits. This pilot study in client-owned dogs with CAD was aimed at evaluating the effects of a newly developed shampoo (Atopivet® Shampoo, Bioiberica SAU, Spain) containing Biosfeen®, Dermial®, colloidal oatmeal and Centella asiatica extract.

**Methods:** A total of 8 dogs (58.4±30.5 months old; 6 females / 2 males) of different breeds with confirmed CAD (Favrot criteria and 8-week elimination diet) were included and applied the shampoo twice weekly for 2 weeks and then once weekly for 2 more weeks. The Canine Atopic Dermatitis Extent and Severity Index (CADESI)-4 and the Pruritus Index for Canine Atopic Dermatitis (PICAD) were assessed by the veterinarian at 0, 15 and 30 days, and the Pruritus Visual Analogue Scale (PVAS) weekly by the owners.

**Results:** CADESI-4 was significantly reduced ( $p < 0.05$ ) from 0 (mean±SD = 26.63±8.00) to 15 days (mean±SD = 16.63±8.65) and from 0 to 30 days (mean±SD = 18.63±13.05). Non-significant improvements over time were seen in PICAD and PVAS. No adverse effects were observed.

**Conclusions:** These results point towards the potential usefulness of this novel LE/GAGs-based shampoo for CAD. Maintaining a twice weekly application after 15 days may lead to better clinical outcomes.





3016

## FELINE UPPER RESPIRATORY TRACT INFECTIONS IN A LARGE AUSTRALIAN ANIMAL SHELTER

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<sup>1</sup>University of Queensland, RSPCA Queensland

<sup>2</sup>University of Queensland

<sup>3</sup>RSPCA Queensland

**Objectives:** Feline upper respiratory tract infection (FURTI) is a severe problem in high density, stressful environments such as animal shelters. We explore risk factors for this disease, using retrospective and prospective data to better understand associations with important animal and environment related factors.

**Methods:** We used natural language processing (NLP) and machine learning to obtain accurate case ascertainment, subsequently used to conduct a risk factor analysis. Swabs were collected over 11 months to quantify the introduction of pathogens of FURTI into the shelter. An intervention study assessed whether administering an appetite stimulant had an effect on pathogen shedding and development of disease.

**Results:** Case ascertainment had an accuracy of 0.95 (95% CI 0.92, 0.97). Disease prevalence was predicted to be 23.59%. Females were only 0.8 (95% CI 0.76, 0.84) times as likely as males to be classified as diseased, while kittens were 0.5 (95% CI 0.48, 0.53) times as likely as adults. Animals seized due to cruelty complaints were found to have the highest probability of disease.

**Conclusions:** While presence of pathogens was not associated with subsequent clinical disease, strategies like foster placement and behavioral rehabilitation were strongly associated with incidence of disease. Administration of Mirtazapine did not show significant reduction in pathogen shedding or disease over time.





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## TUMOR ABLATION IN CANINE AND FELINE PATIENTS USING A FOCUSED ULTRASOUND ROBOTIC SYSTEM

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**Objectives:** The current study presents the outcomes of utilizing Focused Ultrasound (FUS) ablation for treating spontaneous tumors in dogs and cats, employing a custom-made Magnetic Resonance Imaging (MRI)-compatible FUS robotic system.

**Methods:** The system utilizes a single-element, spherically focused transducer operating at 2.6 MHz to non-invasively deliver high intensity ultrasonic energy to the tumor site. The efficacy of this technology was assessed through a trial involving 12 dogs and cats. All treatment procedures were performed successfully prior to tumor excision by the referring veterinarian.

**Results:** Histological examination of excised tumors revealed evidence of thermal necrosis on the H&E-stained slides, visualized as well-defined regions of destroyed cell architecture. Overall, the FUS system demonstrated precise targeting capabilities, enabling partial ablation of tumors at various anatomical locations in veterinary patients. Notably, the system's portability facilitated its seamless integration into veterinary clinics.

**Conclusions:** The study outcomes revealed promising therapeutic potential, suggesting that the developed technology could provide a viable avenue for non-invasive therapeutic interventions in veterinary oncology.





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## SYMPTOMATIC NARCOLEPSY IN A DOG WITH FUNCTIONAL PITUITARY GLAND MACROADENOMA

**Christina Koufaki**<sup>1</sup>, Anastasia Karafylia<sup>1</sup>, Nektarios Soubasis<sup>1</sup>, Dimitra Psalla<sup>2</sup>, Ioannis Panopoulos<sup>3</sup>, Theofanis Liatis<sup>4</sup>

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**Objectives:** To raise awareness among clinicians about considering symptomatic narcolepsy in the differential diagnoses list of an old dog with cataplexy accompanied by other neurological and/or endocrinological signs. **Methods:** A 7-year-old female neutered Greek Harehound presented with chronic lethargy, dysphonia, sleep attacks, and cataplexy episodes, along with skin lesions. Diagnostic tests including physical examinations, blood tests, CSF analysis, food-elicited cataplexy test, Physostigmine stimulation test, and imaging studies such as MRI and histopathology were performed to confirm the presence of a pituitary gland macroadenoma. LDDST revealed that it was functional.

**Results:** The dog deteriorated and was euthanized due to the pituitary gland macroadenoma. The MRI revealed a space-occupying mass in the cellar region related to the pituitary gland. Histopathology confirmed the diagnosis of a pituitary gland macroadenoma. **Conclusion:** This case highlights the importance of considering symptomatic narcolepsy in dogs with pituitary tumors presenting with cataplexy and other associated signs. The findings contribute to enriching the current veterinary literature and emphasize the need for thorough diagnostic evaluation in similar cases.

### Literature:

1. Cantile C, Baroni M, Arispici M. A case of narcolepsy-cataplexy associated with distemper encephalitis
2. Schmid S, Hodshon A, Olin S et al. Pituitary Macrotumor Causing Narcolepsy-Cataplexy in a Dachshund





3031

## PLASMA LACTATE CONCENTRATION IN SICK CATS WITH STRESS HYPERGLYCEMIA

**Thodoris Christoforidis**<sup>1</sup>, Ioannis Oikonomidis<sup>2</sup>, Jose Joaquin Ceron<sup>3</sup>, Dimitra Pardali<sup>4</sup>, Anny Papa<sup>1</sup>, Alexandra Daravigka<sup>1</sup>, Lamprini Kalogianni<sup>1</sup>, Nektarios Soubasis<sup>1</sup>

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**Objectives:** To investigate the concentration of plasma lactate in sick cats with stress hyperglycemia and its association with serum glucose concentration and struggling.

**Methods:** This was a prospective study, which included sick cats with stress hyperglycemia (SH), sick euglycemic (SE) cats and healthy, euglycemic cats (HE) admitted to a Veterinary Teaching Hospital. Blood sampling from the jugular vein was the first intervention on the cats and was performed upon admission. Struggling was evaluated using a previously validated scoring system. Plasma lactate was measured using i-STAT analyzer (Abbott) within 30-60 seconds from blood sampling.

**Results:** In total, 89 cats were included in this study and were allocated as follows: 23 cats in SH group, 46 cats in SE group and 20 in HE group. Plasma lactate concentration did not differ significantly between the 3 groups (SH: 1.75 [0.59-5.79] mmol/l, SE: 1.76 [0.48-5.01] mmol/l, HE: 1.48 [0.31-2.98] mmol/l; P=0.268). Plasma lactate was significantly, but weakly, correlated with serum glucose ( $r=0.259$ ,  $P=0.014$ ) and struggling ( $r=0.263$ ,  $P=0.013$ ), while serum glucose was not significantly correlated with struggling ( $r=-0.049$ ,  $P=0.645$ ).

**Conclusions:** Under the conditions of our study, sick cats with stress hyperglycemia, sick euglycemic cats and healthy cats did not have different plasma lactate concentrations. Plasma lactate was positively, albeit weakly, correlated with serum glucose concentration and struggling.

### Literature:

Chan DL, Freeman LM, Rozanski EA, Rush JE. Alterations in carbohydrate metabolism in critically ill cats. *J Vet Emerg Crit Care* 2006; 16(2) (S1): S7-S13

Rand JS, Kinnaird E, Baglioni A, Blackshaw J, Priest J. Acute stress hyperglycemia in cats is associated with struggling and increased concentrations of lactate and norepinephrine. *J Vet Intern Med.* 2002 Mar-Apr;16(2):123-32





3032

## SUBCLAVIAN ARTERY THROMBOSIS IN A DOG WITH HYPERADRENOCORTICISM

**Thodoris Christoforidis**<sup>1</sup>, Styliani Sevastoudi<sup>1</sup>, Anastasia Karafylia<sup>1</sup>, Dimitris Kontidis<sup>1</sup>, Rania Farmaki<sup>1</sup>, Michail Patsikas<sup>2</sup>, Nektarios Soubasis<sup>1</sup>

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**Objectives:** To present a rare case of subclavian arterial thrombosis associated with hyperadrenocorticism in a dog.

**Methods:** A 15-year-old female Maltese dog was presented with a three-month-history of polyuria/polydipsia and an acute onset of non-weight-bearing lameness in the right forelimb. Upon clinical examination, generalized non-pruritic symmetrical hypotrichosis/alopecia and extreme pain of the forearm were observed. Complete blood count, serum biochemistry, urinalysis, coagulation tests and computed tomography-angiography were performed.

**Results:** A damage of the lower motor neurons of the right forelimb was revealed by neurological examination. Serum biochemistry showed an elevation in liver enzymes. Computed tomography-angiography demonstrated a thrombus in the right subclavian artery and enlargement of both adrenal glands. Antiplatelet and anticoagulant treatment was administered. Three weeks later, the dog showed marked improvement in ambulatory function. A low dose dexamethasone suppression test was performed which was compatible with hyperadrenocorticism. The owner declined treatment with trilostane and a long-term antithrombotic treatment was suggested.

**Conclusions:** Dogs with hyperadrenocorticism might develop serious and life-threatening secondary complications. Although it is documented in literature, hypercoagulability in hyperadrenocorticism needs further research for the clinician to be able to manage such cases.

### Literature:

De Laforcade A, Bacek L, Blais MC, Goggs R, Lynch A, Rozanski E. Consensus on the Rational Use of Antithrombotics in Veterinary Critical Care (CURATIVE): Domain 1-Defining populations at risk. *J Vet Emerg Crit Care.* (2019) 29:3.

Eom T-Y, Choi J-W, Yoon K-A, Jeong S-W and Kim J-H (2021) Case Report: Non-traumatic Unilateral Forelimb Thrombosis Associated With Hyperadrenocorticism in a Dog. *Front. Vet. Sci.* 8:795928.

Yang VK, Cunningham SM, Rush JE, de Laforcade A. The use of rivaroxaban for the treatment of thrombotic complications in four dogs. *J Vet Emerg Crit Care.* 2016;26:729-7363.







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## NASOPHARYNGEAL STENOSIS FOLLOWING ELONGATED SOFT PALATE RESECTION USING A VESSEL-SEALING DEVICE IN A YORKSHIRE TERRIER

**Maria Psyllaki**, Christos Yiapanis

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**Objective:** This case report aims to present a case involving a 7-year-old Female Yorkshire Terrier exhibiting chronic inspiratory stridor and reverse sneezing, due to elongated soft palate, and to shed light on the rare complication of nasopharyngeal stenosis subsequent to the correction of soft palate elongation with the use of a vessel-sealing device.

**Methods:** Endoscopic examination was conducted, revealing soft palate elongation extending beyond the epiglottis during inspiration, along with thickening and ventral deviation of the epiglottis. Additionally, a Grade II tracheal collapse was identified. Surgical intervention involved palatoplasty using a vessel-sealing device (LigaSure) to shorten the elongated soft palate. Five months post-surgery, abnormal sounds and stridor were observed, due to a thin membrane which developed across the proximal nasopharynx, completely occluding it. The membrane was removed surgically in an attempt to reestablish the nasopharyngeal opening.

**Results:** The initial surgery with the use of a vessel-sealing device successfully corrected the elongated soft palate, alleviating the presenting clinical signs. However, the dog subsequently developed adhesions at the surgical site, leading to airway obstruction and respiratory distress. Repeat surgical intervention was required to address the stricture. Communication with the owner one year following revision surgery revealed occasional abnormal sounds, especially after rapid ingestion, suggesting partial resolution of symptoms. Post-revision additional endoscopy revealed partial reformation of scar tissue. The owners declined additional surgery.

**Conclusions:** Nasopharyngeal stenosis represents a rare postoperative complication, potentially causing persistent respiratory symptoms. To the authors' knowledge, nasopharyngeal stenosis after soft palate resection with a vessel sealing device (LigaSure™) has not been reported in the veterinary literature. Enhanced understanding and management of such complications are crucial for optimizing patient outcomes and client satisfaction. This case underscores the significance of meticulous postoperative surveillance and emphasizes the necessity for long-term follow-up in instances of intricate airway surgeries within veterinary practice.





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## **ANAPLASMA PHAGOCYTOPHILUM, BABESIA SPP. AND DIROFILARIA REPENS CO-INFECTION IN DOG – A CASE REPORT FROM POLAND**

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**Objectives:** This case study aims to describe the co-infection with *Anaplasma phagocytophilum*, *Babesia* spp., and *Dirofilaria repens* in a dog from Warmia and Mazury region (Poland).

**Methods:** A 4-year-old male Central Asian Shepherd dog presented with symptoms of apathy, balance disorders, and lack of appetite. Clinical examination revealed pale mucous membranes and fever (39.8°C). Diagnostic tests including morphology, biochemistry, blood smear, and SNAP 4Dx Plus (IDEXX) were performed. Blood samples were sent to a diagnostic laboratory for PCR testing to confirm the initial results. Symptomatic treatment with imidocarb dipropionate, doxycycline, metamizole, fluids supplementation and dexamethasone was implemented. Following confirmation of the co-infection, treatment with doxycycline was continued for 3 weeks along with probiotic therapy. Monthly administration of imidacloprid + moxidectin spot-on preparation was recommended for 6 months.

**Results:** Morphological examination revealed thrombocytopenia, without anaemia, while biochemical tests were within normal limits. Blood smear examination showed numerous *Babesia* spp. merozoites in erythrocytes, *Anaplasma phagocytophilum* morulas in neutrophils, and microfilariae. The SNAP test yielded positive results for anaplasmosis and dirofilariosis. PCR tests confirmed the presence of *Dirofilaria repens* and *Anaplasma phagocytophilum* in blood samples. The day after imidocarb dipropionate injection, the dog did not show any clinical symptoms. Repeated diagnostic tests for *Babesia* spp. after two weeks, *A. phagocytophilum* after three weeks and *D. repens* after six months showed a negative result.

**Conclusions:** It should be noted that the described case is extreme from the point of view of vector-borne diseases. However, this is a good example of the current pressure of infectious disease vectors and the pathogens they transmit on companion animals. Many of such cases may be underdiagnosed, which may pose a significant threat to their health status. Funded by the Minister of Science under the Regional Initiative of Excellence Program.





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## INTRAOPERATIVE CYTOLOGICAL EXAMINATION OF SKIN AND SUBCUTANEOUS TISSUE MASSES: A RAPID DIAGNOSTIC METHOD DURING SURGERY OF THE DOG

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**Objectives:** Skin and subcutaneous tumors appear very often in veterinary medicine. The aim of the study is to assess the reliability of the intraoperative cytological diagnosis using the imprint method (IM), compared with the preoperative cytological diagnosis using fine needle aspiration method (FNA). The hypothesis is that IM is equally or more reliable than FNA.

**Methods:** Fifty-seven dogs with skin and subcutaneous masses were included. The samples were taken with FNA preoperatively and with IM intraoperatively, following mass excision. The cytology results were categorized as: malignant, non-malignant, inflammatory, non-diagnostic. Histopathology of the masses was used as the reference diagnostic method using the same categorization method.

**Results:** From 109 masses examined, 44/109(40,4%) originated from the skin and 65/109(59,6%) from subcutaneous tissue. In FNA, 48/109(44,5%) masses were diagnosed as malignant, 28/109(25,7%) as non-malignant, 8/109(7,3%) as inflammatory and 25/109(22,9%) were non-diagnostic. FNA sensitivity was 80,5%, specificity 66,7% and diagnostic accuracy 79,5%. Accordingly, in IM, 53/109(48,6%) masses were diagnosed as malignant, 26/109 (23,9%) as non-malignant, 4/109(3,7%) as inflammatory and 26/109(23,9%) were non-diagnostic. Similarly, sensitivity was 84,1%, specificity 66,7% and diagnostic accuracy 82,4%.

**Conclusions:** According to the results, the hypothesis is being verified that IM is an equivalently reliable diagnostic method for these types of masses, compared to FNA.

### **Literature:**

Ghisleni, G., Roccabianca, P., Ceruti, R., Stefanello, D., Bertazzolo, W., Bonfanti, U. and Caniatti, M. (2006). Correlation between fine-needle aspiration cytology and histopathology in the evaluation of cutaneous and subcutaneous masses from dogs and cats. *Veterinary Clinical Pathology*, 35(1), pp.24–30. doi:<https://doi.org/10.1111/j.1939-165x.2006.tb00084.x>.

Ipek, V., Cangul, I.T. and Akkoc, A. (2021). Comparative Evaluation of the Cytological, Histopathological and Immunohistochemical Findings of Canine Cutaneous and Subcutaneous Masses. *Acta Veterinaria*, 71(1), pp.61–84. doi:<https://doi.org/10.2478/acve-2021-0005>.





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## STUDY OF OXIDANT/ANTIOXIDANT PROFILE IN DOGS WITH MAMMARY CANCER DURING THE PERI-OPERATIVE PERIOD

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**Objective:** In cancer cases, surgery is the main cause of Reactive Oxygen Species (ROS) production involved in tumour progression. During the immediate post-operative period, any imbalance between ROS production and host antioxidant capacity (oxidative stress) is considered responsible for the growth and metastasis of cancer cells reducing survival. Our objective was to investigate the oxidant/antioxidant profile in the blood of dogs with mammary cancer, during the peri-operative period hypothesizing that the already existed oxidative stress would be increased after mastectomy.

**Methods:** Twelve bitches with mammary cancer and without distant metastases were subjected to mastectomy (similar extent of surgical trauma) receiving the same anaesthetic protocol. The oxidant/antioxidant status in the blood serum of each dog was evaluated chromatometrically by using the d-ROMs (Reactive Oxygen Metabolites-derived compounds) test and the BAP (Biological Antioxidant Potential) test, on the 1st day (immediately before and after surgery) and on the 2nd, 3rd and 10th day post-operatively. Oxidative Stress Index (OSI), which is the ratio of d-ROMs and BAP values, was also calculated.

**Results:** Statistically significant differences (increased values) were found only in d-ROMs, between measurements on the 1st day before mastectomy and the 2nd or the 3rd post-operative day ( $p = 0.007$  and  $p = 0.002$ , respectively), as well as between measurements on the 1st day after mastectomy and the 3rd post-operative day ( $p = 0.03$ ). Although OSI was elevated immediately after mastectomy and on the 2nd post-operative day, no significant differences were found.

**Conclusion:** Based on the increased ROS production on the 2nd and 3rd day after mastectomy in bitches with mammary cancer, any interventions such as use of anaesthetic drugs with antioxidant properties or use of selective antioxidants, could be beneficial in improving survival.





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## PENETRATING AIRGUN SPINAL CORD INJURY IN CATS. RETROSPECTIVE STUDY OF 23 CATS (1998-2022)

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**Objectives:** The aim of this study was to evaluate and describe the airgun spinal cord injuries in cats.

**Methods:** Records of cats presented to the Companion Animal Clinic of the Aristotle University of Thessaloniki with neurological deficits associated with 4,5mm airgun projectile (AGP) spinal trauma (ST) were included. Only cats with a projectile lodged in the spinal canal were included in the study population. Cats were categorized into groups according to the neurological severity, management, season of presentation and projectile location in the spine.

**Results:** A total of 23 cats (n=23) were included in this retrospective study. There were 1 cervical (C), 17 thoracolumbar (TL) and 5 lumbosacral (LS) airgun spinal column injuries. The presence of the projectile in the spinal canal was confirmed by radiography. Forty-four percent of the cases were presented in autumn, which was the most common season of presentation. Surgical management was elected in 87% of the cats, 4% were managed conservatively and 9% were euthanised due to poor prognosis without treatment. Neurological severity was grade V in 83% of the cats, grade III in 4% and 13% of the cats had asymmetric neurological deficits. Conscious movement was observed in 30% of the surgically treated cats, spinal walking in 20% and 50% were unimproved. No motor improvement was reported in the cats treated conservatively. Complete recovery of urination was not observed in any case.

**Conclusion:** Airgun spinal injuries result in severe movement and micturition disorders in cats. Due to the small sample size, it is uncertain whether the outcome can be influenced by surgical or conservative management.





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## CLINICOPATHOLOGICAL FINDINGS IN APPARENTLY HEALTHY LEISHMANIA-SEROPOSITIVE DOGS

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**Objectives:** Canine leishmaniosis (CanL) is a parasitic disease highly endemic in the Mediterranean region, characterized by a wide range of clinical manifestations. Despite the significant prevalence of infected dogs remaining apparently healthy, limited studies have been carried out to assess their clinicopathological profile [3]. The aim of the study was to determine the proportion of *L. infantum*-seropositive apparently healthy dogs exhibiting clinicopathological findings, evaluate their antibody levels and identify the most frequent laboratory abnormalities.

**Methods:** Two hundred and nine *L. infantum*-seropositive apparently healthy dogs were enrolled. All of them were seropositive to *L. infantum* after performing a commercial quantitative serological test (ELISA, INgezim® Leishmania) and showed no clinical signs based on a full physical examination. Blood samples were collected for routine laboratory tests including serum protein electrophoresis, CBC and biochemical profile. Additionally, serum C-reactive protein (CRP) and serum circulating immune complexes (CICs) were also analysed.

**Results:** Twenty-nine (14%) of the *L. infantum*-seropositive apparently healthy dogs showed at least one potential clinicopathological finding compatible with disease in the veterinarian's opinion. Among them, the vast majority (76%, 22/29) presented high anti-Leishmania antibody levels. Regarding the clinicopathological findings, the most common laboratory abnormalities observed included the presence of circulating immune complexes (100%, 29/29) followed by serum protein abnormalities (97%, 28/29) and hematological alterations (93%, 26/28). In contrast, biochemistry findings and altered C-reactive protein concentration were present in only 48% (14/29) and 38% (11/29) of dogs, respectively.

**Conclusions:** The study results revealed a significant proportion of apparently healthy *L. infantum*-seropositive dogs with clinicopathological findings attributable to CanL. Therefore, integrating routine laboratory tests to assess their clinical health status appears crucial for early disease diagnosis. Additionally, these findings suggest that CICs could serve as a potential complementary biomarker for disease progression. Further studies must be undertaken to confirm preliminary data.

### References:

- Baxarias M., Mateu C., Miró G. et al. Serological survey of *Leishmania infantum* in apparently healthy dogs in different areas of Spain. *Vet Med Sci.* 2023; 9:1980-1988.
- Baxarias M., Viñals J., Álvarez-Fernández A. et al. Detection of specific antibodies against *Leishmania infantum* in canine serum and oral transudate using an in-house ELISA. *Parasites Vectors.* 2022; 15:164.3.
- Baxarias M., Jornet-Rius O., Donato G. et al. Signalment, Immunological and Parasitological Status and Clinicopathological Findings of *Leishmania*-Seropositive Apparently Healthy Dogs. *Animals.* 2023; 13:1649.
- Solano-Gallego L., Miró G., Koutinas A. et al. LeishVet guidelines for the practical management of canine leishmaniosis. *Parasites Vectors.* 2011; 4:86.
- Sarquis J., Parody N., Montoya A. et al. Clinical validation of circulating immune complexes for use as a diagnostic marker of canine leishmaniosis. *Front. Vet. Sci.* 2024; 11:1368929.





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## PRESUMED MUCOPOLYSACCHARIDOSIS IN A MIXED-BREED DOG

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**Objectives:** To describe the clinical presentation and diagnostic approach of a suspected mucopolysaccharidosis (MPS) case in a dog.

**Methods:** A 6-month-old, male, mixed breed dog was presented with bilateral elbow luxation, failure to thrive and progressive inability to ambulate. Major clinical findings included corneal opacification, muscle atrophy, joint laxity and left-sided heart murmur. Clinicopathologic testing, cerebrospinal fluid (CSF), synovial fluid (SF) and bone marrow (BM) aspiration cytology, radiographs and heart ultrasound were performed. The dog's severe deterioration, 4 months after presentation, forced the owners to choose euthanasia. Postmortem examination was carried out.

**Results:** No clinically relevant hematologic or biochemical abnormalities were documented in this case. Echocardiography revealed mitral valve thickening with mild regurgitation and severe dilation of the aorta. Magenta-staining granules were noticed in both blood neutrophils and lymphocytes, as well as in the myeloid lineage in the BM and in SF monocytes. Moreover, cytoplasmic vacuolation was present in blood lymphocytes and CSF and SF monocytes. Skeletal radiography showed generalized osteopenia, joint effusions and hind limb deformity. Histologically, severe vacuolation was predominant in connective, cardiac, skeletal and smooth muscle tissue, various epithelial and liver cells as well as in the nervous system affecting neurons and glial cells.

**Conclusions:** Cytologic and histopathologic evidence indicated a lysosomal storage disease. The diagnosis of MPS was suspected based on the clinicopathologic and imaging features.

### Literature:

Skelly BJ, Franklin RJ. Recognition and diagnosis of lysosomal storage diseases in the cat and dog. J Vet Intern Med. 2002 Mar-Apr;16(2):133-41

Silverstein Dombrowski DC, Carmichael KP, Wang P, O'Malley TM, Haskins ME, Giger U. Mucopolysaccharidosis type VII in a German Shepherd Dog. J Am Vet Med Assoc. 2004 Feb 15;224(4):553-7, 532-3.





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## BEYOND BORDERS: *DIROFILARIA IMMITIS* INFECTION IN DOGS SPREADS TO PREVIOUSLY NON-ENZOOTIC AREAS IN GREECE

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**Objectives:** Although infection of dogs with *Dirofilaria immitis* is considered enzootic in northern regions of Greece, on the contrary, until up to date, the available data on the occurrence of infection in southern parts of the country demonstrate its scarcity. In the light of accumulating evidence of dirofilariosis spreading to new areas around Europe, the aim of the present study was to update the current knowledge on the prevalence of *Dirofilaria immitis* infection in dogs in areas of the country that were previously considered as non-enzootic, i.e., Central Greece, Attica, Peloponnese, North Aegean, South Aegean, Crete and Ionian islands.

**Methods:** To address this question, in total, 1528 blood samples were collected from randomly selected adult dogs from the aforementioned areas of the country and were examined by the Dirochek® ELISA kit (Synbiotics). Additionally, published data until 2022 on the prevalence of infection in dogs in the same areas of Greece were collected and compared to the data obtained in the present study. Statistical analysis of the results was performed using the 'Wilson' Score interval method (EpiTools).

**Results:** In total, 165 (10.8%) out of 1528 examined animals were found positive for *D. immitis*. In detail, the prevalence of infection in dogs was 21.7, 13.7, 10.7, 5.35, 4.65, 6.2 and 16.9 % for *D. immitis*, in Central Greece, Attica, Peloponnese, North Aegean, South Aegean, Crete and Ionian Islands, respectively. Furthermore, infection with *D. immitis* is recorded for the first time in dogs in the island of Crete. The probability of a dog to become infected with *D. immitis* has increased circa 4.1 times since 2022 in the previously non-enzootic areas.

**Conclusions:** This study denotes the spread of *D. immitis* infection in previously clean areas and highlights the necessity to apply preventive measures.







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## THE INFLUENCE OF INSECT-BASED FOOD ON SELECTED MORPHOLOGICAL, BIOCHEMICAL AND CYTOMETRIC BLOOD PARAMETERS IN DOGS

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**Objectives:** The use of insects in the diet of domestic animals is a novel concept, although entomophagy is observed in nature in wild Canidae. This research was carried out as part of the development of insect-based food for dogs with food-responsive enteropathies. The key aspects of introducing insects into dogs' diet concern digestibility, protein and fat content, and adaptation of the digestive tract. Despite the advantages, there are contraindications, such as the lack of chitin-digesting enzymes, the presence of parasites specific to carnivorous animals, and potential anti-nutritional substances. Testing pet food in a clinic may be difficult due to owners' different approaches to animal nutrition and the possibility of contact with different foods and pathogens. In order to eliminate the influence of these factors, it was proposed to conduct research on a healthy group of dogs under controlled conditions. The aim of the study was to assess the effect of dog food based on mealworm (*Tenebrio molitor*) on selected morphological, biochemical and cytometric blood parameters. Blood was collected from the animals before the study began.

**Methods:** The dogs were then kept on mealworm-based food. Blood was collected at every 2-week interval. The experiment lasted 2 months. Morphological and biochemical tests of the blood were performed in an accredited veterinary laboratory. After receiving the whole blood, its analysis began immediately. The first step was lysis of erythrocytes, then the cells were stained for CD3, CD4, CD8, CD161 and CD79a. The samples were subjected to cytometric analysis. The absolute number of lymphocyte population was compared with the blood count data. All data are presented as the mean  $\pm$  SD. For comparison analysis of variance for repeated measurements (ANOVA) followed by HSD Tukey Post-Hoc test. Results were deemed significant when the p-values were  $< 0.05$ .

**Results:** The lack of effect of food with insect protein on the absolute number of T and B lymphocytes and NK cells in the peripheral blood of dogs allows to assess that the food used is neutral for the body. This means that the addition of insect protein has neither an immunostimulatory effect nor does it cause immunosuppression in the range of the tested parameters. The research results clearly suggest that the tested dog food with added insect protein, compared to commercial dog food, seems to be safe in terms of its effect on the immune system. Differences between selected morphological and biochemical blood parameters were demonstrated. The differences should be considered beneficial from the point of view of the dogs' clinical condition.

**Conclusions:** Taking into consideration all the results of our study, it could be concluded, that *Tenebrio molitor*-based food has no immunosuppressive effect and can be considered as a safe food with the respect to the immune system. Moreover, the health-promoting nature of the food was confirmed based on morphological and biochemical blood tests. The result of the obtained research results is the possibility of using the developed food on dogs with food responsive enteropathies.





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## MANAGEMENT OF INGUINAL FISTULAS AND PARAPHIMOSIS IN A DOG BY USING TWO RECONSTRUCTIVE TECHNIQUES

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**Objectives:** This case examines the efficient management of persistent penile protrusion and chronic inguinal fistulas in a dog, highlighting the challenges associated with resolving paraphimosis in a single stage depending on the underlying causes and predisposing factors.

**Case description:** A 13-month-old neutered male mongrel dog was referred to our clinic due to penile exposure and two chronic fistulas in the inguinal region. Antibiotic therapy was prescribed based on susceptibility testing results. Ultrasonographic and CT-CTA evaluation revealed widespread inflammation and multiple inguinal fistulas, although no foreign objects were detected. Surgical management options, including one- or two-stage procedures for paraphimosis and fistulas, were suggested. Debridement of the fistulas and restrictive scars was performed to release tension from the skin. The preputial advancement technique involved shortening the preputialis muscle and securing the leading dermal border of the prepuce to the abdominal wall, followed by closure of the ventral half of the preputial ostium. Two months postoperatively, the fistula recurred, and scar tissue formation retracted the prepuce caudally, leaving the penis tip exposed. Histopathology revealed chronic inflammation but no signs of malignancy. Wide debridement of the wound, leaving a large defect, was conducted, followed by the decision to advance an axial pattern flap. A flank fold flap grasped from the left hindlimb effectively covered the inguinal wound. Three years postoperatively, there have been no signs of paraphimosis or fistula recurrence.

**Conclusions:** While the preputial advancement technique typically resolves paraphimosis, in this case, an additional technique targeting another area of the inguinal region was necessary to successfully manage skin tension and penile protrusion.



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## INVESTIGATION OF THE EFFICACY OF MOLNUPIRAVIR AS AN ADJUNCT TO CONVENTIONAL THERAPY IN THE TREATMENT OF FELINE INFECTIOUS PERITONITIS IN CATS

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**Objectives:** Feline Infectious Peritonitis (FIP) is a common disease in cats with high mortality. Immunosuppressive treatment attempts, known as conventional treatment, often fail. Many studies have proven the effectiveness of molnupiravir in treating coronavirus after the COVID-19 pandemic. This study aimed to evaluate the success rate of molnupiravir as an adjunct to conventional treatment in cats naturally infected with FIP.

**Methods:** The animal material of the study consisted of cats in which RT-PCR determined viral load in effusion or lymph node samples from patients with a preliminary diagnosis of FIP. Twenty-five cats were treated with conventional treatment as Group 1 (Prednisolone 1 mg/kg orally once daily, Pentoxifylline 10 mg/kg BID orally), and 35 cats (Group 2) were treated with molnupiravir (24 mg/kg/BID) in addition to conventional treatment. Clinical scoring (abdominal distension, anorexia, lethargy, weight loss, icterus, neurological abnormalities), effusion scoring by abdominal (A)FAST ultrasonography, hematocrit and serum albumin-globulin ratio by blood samples taken from *V. cephalica antebrachii* were performed on days 0 and 60.

**Results:** In Group 1, the albumin-globulin ratio was 0.39 before and 0.52 after treatment, and the hematocrit values were 27.24 and 27.57, respectively, but there was no statistical significance in both values. In Group 2, the albumin-globulin ratio and hematocrit values before and after treatment were 0.40, 0.70, 25.02, and 33.15, respectively, and these increases were statistically significant. The AFAST score for Group 1 was 2.88 before and 2.42 after treatment, while the scores for Group 2 were 3.14 and 0. The pre-and post-treatment clinical score values of Group 1 and Group 2 were 4.16 and 4.5 and 4.42 and 0.15, respectively. The survival rate was 28% in Group 1 and 94.28% in Group 2 ( $p < 0.05$ ). No adverse effects were encountered in molnupiravir-treated cats during the treatment period.

**Conclusions:** This study provides evidence for the use of molnupiravir in cats, demonstrating that molnupiravir is a potentially safe and effective treatment for FIP.





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## PREDICTING RECURRENCE IN CANINE TL-IVDD: MRI FINDINGS AND PROPHYLACTIC DECOMPRESSION STRATEGIES

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**Objectives:** The objective of this study is to investigate potential correlations between specific areas on MRI images and the recurrence of thoracolumbar intervertebral disc disease (TL-IVDD) in dogs.

**Methods:** A retrospective MRI analysis was conducted on 16 out of 185 patients who had undergone surgery for TLIVDD and required a second surgery in new locations due to recurrence. The MRI images were taken at the initial onset, with discs between T10 and L7 graded for degenerative changes using the Pfirrmann Grade (PG) in the T2W-sagittal view. Additionally, quantitative measure of disc signal intensity (SI ratio) and the presence of dark signal intensity (DSI) in the discs was checked in the T1W-sagittal view.

**Results:** A total of 137 discs were analyzed, among which 17 were identified as recurrence sites, with 16 of these being classified as PG 4. The SI ratio decreases as PG grades increase. In the T1W-sagittal view, 32 discs showed DSI, of which 16 were classified as PG 4, and 15 of these were confirmed as recurrence sites. Among the group of patients with recurrent TL-IVDD approximately 62% (10 out of 16) experienced recurrences in locations not adjacent to the initial site. The remaining 6 patients encountered recurrences in nearby areas, which displayed degenerative changes classified as PG4.

**Conclusions:** This study demonstrates that TLIVDD recurrence is more likely to occur not in areas adjacent to the initial sites, but in discs displaying DSI and rated as PG4. The disc exhibiting the lowest SI ratio was not consistently the site of recurrence. Considering these findings, when additional prophylactic decompression is required following initial surgery for IVDD, it may be important to focus on targeting areas with more severe disc degeneration identified on MRI.





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## EFFECT OF TOPICAL PILOCARPINE ON TEAR FILM AND CORNEAL LESIONS IN DOGS DURING GENERAL ANESTHESIA FOR NON-OPHTHALMIC SURGERIES

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**Objective:** To evaluate the qualitative and quantitative characteristics of tear film, and to determine the frequency of corneal lesions in dogs receiving two different ocular treatments during general anesthesia (GA) for non-ophthalmic surgeries: 2% pilocarpine instillation or 0,25% hyaluronic acid drops.

**Methods:** An ophthalmological examination (slit-lamp biomicroscopy, STT-1, BUT, IOP, fluorescein and lissamine green staining, osmolarity) was performed before preanesthetic medication in dogs undergoing elective surgery. Dogs were randomly allocated to receive 0,25% hyaluronic acid (GH) or 2% pilocarpine (GP) as topical ocular treatment during GA. STT-1 was performed immediately after intubation (T-int) and hourly (T-1h, T-2h) until the end of anesthesia. After measurement of STT-1, one drop of the randomly assigned treatment was instilled. The same ophthalmologist performed the complete ophthalmological exam after extubation (T-est) and 24 hours after GA (T-24h).

**Results:** Thirty dogs were included. A statistically difference was observed between GH and GP in STT-1 values at T-1h, T-2h and T-est; in these times the STT-1 values recorded in GP were similar to baseline values. No statistically significant differences were found between the two groups for the other values (BUT - IOP - OSM). Corneal abrasions were observed in 11.7% of eyes at T-est and in 15% at T-24h. There was no significant difference in incidence of corneal abrasions between groups.

**Conclusions:** Corneal abrasions are the most common ocular complication during GA for non-ophthalmic surgery in dogs. The topical pilocarpine increased tear production but did not eliminate corneal complications during GA. In GP tear film quality did not change after exposure keratopathy associated with GA.

### Literature:

Dawson et al. A prospective study of the prevalence of corneal surface disease in dogs receiving prophylactic topical lubrication under general anesthesia. *Veterinary Ophthalmology*, 19(2), 124-129; 2016.





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## A RARE CASE OF FOLLICULAR CYSTITIS AND URETHRITIS IN A LARGE BREED DOG.

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**Objectives:** To report clinical presentation, diagnosis and treatment of a rare case of follicular cystitis, an uncommon inflammatory change of the urinary bladder wall, in a dog.

**Case description:** A 10-year-old, mixed large breed, female, neutered, overweight dog was presented for routine clinical examination. History was unremarkable apart from inadequate deworming. Routine urinalysis revealed microscopic hematuria. Differential diagnosis included infection, lithiasis and neoplasia of the urinary tract. Complete blood count was unremarkable. Blood serum biochemistry indicated a moderate increase in liver enzymes activity. Urinalysis indicated isosthenuria (urine SG 1011), alkaline pH, 50-100 red blood cells/hpf (x40), 20 leucocytes/hpf (x40) and bacteria. Urine culture was positive for *E. coli*. Abdominal radiograph was unremarkable while abdominal ultrasound examination indicated multiple diffuse hypoechoic nodules in the liver and thickening of the front and dorsal part of urinary bladder wall and a nodular formation on the ventral part. Ultrasound-guided FNA cytology of the liver nodules indicated lipidosis. Cystoscopy revealed diffuse white small nodules of hard texture located in the upper third of the urethra and in the entire urinary bladder wall. Four endoscopic-guided urinary bladder nodule biopsies were collected. Two of the biopsies were sacrificed for cytology and tissue culture. Cytology revealed abundant small lymphocytes, erythrocytes and few non-degenerated neutrophils, while tissue culture was positive for *E. coli*. Histopathology showed multiple aggregates of lymphocytes in a follicular arrangement (lymphoid follicles) surrounded by low numbers of haemosiderophages and plasma cells in the lamina propria consistent with follicular cystitis. Based on sensitivity test treatment with enrofloxacin was initiated.

**Conclusions:** Follicular cystitis and urethritis is an uncommon inflammatory entity of the urinary bladder wall and urethra characterized by the formation of lymphoid structures. In the present case intramural *E. coli* represents a potential triggering factor for development of this rare clinical entity.

### Literature:

Ligon, M. M., Liang, B., Lenger, S. M., Parameswaran, P., Sutcliffe, S., Lowder, J. L., & Mysorekar, I. U. (2023). Bladder mucosal cystitis cystica lesions are tertiary lymphoid tissues that correlate with recurrent urinary tract infection frequency in postmenopausal women. *The Journal of Urology*, 209(5), 928-936.

Viitanen, S. J., Tuomisto, L., Salonen, N., Eskola, K., & Kegler, K. (2023). *Escherichia coli*-associated follicular cystitis in dogs: Clinical and pathologic characterization. *Journal of Veterinary Internal Medicine*, 37(3), 1059-1066.

Xavier Júnior, F. A. F., Martins, P. L., Araújo, S. L., Morais, G. B., Viana, D. A., Silva, F. M. O., & Evangelista, J. S. A. M. (2023). Follicular cystitis in a dog: First case report described in Brazil. *Arquivo Brasileiro de Medicina Veterinária e Zootecnia*, 75, 185-185.





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## ABILITY OF A MINIMALLY PROCESSED DIET TO REDUCE OXIDATIVE STRESS IN CHRONIC ENTEROPATHIC CATS.

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**Objectives:** Feline chronic enteropathies (CE) include a spectrum of diseases with chronic gastrointestinal signs. Cats with CE that respond to dietary therapy are described as having a food-responsive enteropathy (FRE), while cases requiring steroid treatment are referred as SRE. Laboratory parameters or histopathologic lesions are unhelpful in differentiating those conditions; therefore, a proper elimination trial is needed. Commercial hydrolysed diets and novel protein diets have both been used for feline CE; however, some authors demonstrated that adverse reaction to vegetal non-hydrolysed proteins associated with dietary starch could be responsible for FRE. Moreover, the administration of dry food may be associated to an increased oxidative stress burden, which represent a possible cause of gut inflammation. No data are available as regards clinical and oxidative stress response to diets with ultra-processed meat by products (UMBP) in comparison to those formulated with minimally processed meat (MPM) inclusion, but according to authors the seconds are characterized by a greater resolution of clinical signs. The present project is aimed to compare the antioxidant status of cats with CE fed two dietary regimens differently processed to those of healthy controls.

**Methods:** Twenty five cats suffering from CE were screened for serum dROMs, OXY-Adsorbent test and dROMs/OXY-Adsorbent test (Osi), before and after 30 days of dietary trial. Group MPMd (n=13) previously unresponsive to UMBP wet diet was fed a MPM canned diet, while the remaining newly diagnosed CE cats were assigned to Group UMBPhydrolyzed wet diet.

**Results:** dROMs (112.3 Carr/U), and Osi (0.3) levels were significantly lower ( $p=0.02$  and  $p=0.01$ , respectively), while mean OXY-Adsorbent test result (339.6 HClO/mL) was significantly higher ( $p=0.009$ ) in MPMs groups at day 30, as compared to baseline and UMBPh group values.

**Conclusions:** The study suggests that feline FRE are characterized by redox imbalance, that may be reduced if patients are fed a MPMd.

### References:

Marsilio S. Feline chronic enteropathy. J Small Anim Pract. 2021 Jun;62(6):409-419.

Usuga A, Rojano BA, Duque JC, Mesa C, Restrepo O, Gomez LM, Restrepo G. Dry food affects the oxidative/antioxidant profile of dogs. Vet Med Sci. 202 Mar;9(2):687-697.







3064

## SUBMUCOSAL INFUSION OF MEDICAL HONEY IN 10 CATS WITH FELINE CHRONIC GINGIVOSTOMATITIS

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**Objectives:** Feline chronic gingivostomatitis (FCGS) is an extremely painful and debilitating inflammatory disease of the feline oral cavity. The use of medical honey appears in the literature to provide promising outcomes in various medical applications. The multifaceted properties of honey, including its antibacterial, anti-inflammatory, and antioxidant characteristics, suggest it may offer a novel approach to alleviating the pain and discomfort associated with this debilitating inflammatory disease. Further research on medical honey's efficacy for FCGS could offer insights into alternative treatments, improving the well-being of affected cats.

**Methods:** Ten client-owned cats with clinical signs of FCGS underwent clinical examination and oral cavity examination. After performing the appropriate surgical treatment in each case, 1ml of medical sterile honey was infused on the right side of the palatoglossal folds, while the left side served as the control. After one month, the cats were re-examined and photographed to compare lesion progression.

**Results:** On re-examination of the cats, no significant difference was observed between the two sides of the palatoglossal folds with respect to redness. However, clinically a mild improvement was revealed in the hyperplastic type lesions on the side where medical honey was applied.

**Conclusions:** Our study suggests that a single submucosal administration of medical honey in the palatoglossal folds may result in a slight improvement in hyperplastic type lesions associated with FCGS. However, further investigation is required to evaluate medical honey's effect on inflammation. Future studies could involve 2-3 submucosal injections of medical honey with intervals of 3 weeks to evaluate its efficacy comprehensively.

### References:

Al-Khanati NM, Al-Moudallal Y (2019) Effect of Intra-socket Application of Manuka Honey on Postsurgical Pain of Impacted Mandibular Third Molars Surgery: Split-Mouth Randomized Controlled Trial. *J Maxillofac Oral Surg* doi: 10.1007/s12663-018-1142-z.

Soltero-Rivera M, Goldschmidt S, Arzi B (2023) Feline chronic gingivostomatitis current concepts in clinical management. *J Feline Med Surg*. doi:10.1177/1098612X231186834





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## CALVARIAL HYPEROSTOSIS IN A 22-WEEK-OLD STAFFORDSHIRE BULL TERRIER.

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**Case description:** A 22-week-old Staffordshire bull terrier presented with acute onset bilateral mucopurulent nasal discharge and lethargy. Clinical examination revealed pyrexia and pain upon palpation of the head, accompanied by marked asymmetrical swelling. Haematological analysis showed mild non-regenerative normocytic normochromic anaemia and monocytosis, while biochemistry revealed mild hyponatremia and hypochloraemia. CT scan of the head indicated severe thickening of multiple calvarial bones with periosteal reaction, along with subtle areas of fluid accumulation and contrast enhancement. Additionally, there was mild thickening of the mucosa of the frontal sinuses suggestive of sinusitis, fluid in the left nasal passage, choanae, nasopharynx, and mandibular. Histological examination of the bone revealed periosteal reaction with fibrosis, neutrophilic and histiocytic inflammation, and necrosis. Bone culture yielded negative results. The dog was diagnosed with calvarial hyperostosis and treated with methadone, paracetamol, and meloxicam. Upon recheck 10 days later, all clinical signs had resolved except for mild persistence of skull asymmetry. To the author's knowledge, this condition has been reported in few breeds but never in the Staffordshire bull terrier. Furthermore, the presence of bilateral purulent discharge represents a novel clinical sign not previously reported.





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## EFFECT OF DEXMEDETOMIDINE ON HIND LIMB MYOTATIC REFLEXES IN DOGS WITH THORACOLUMBAR SYNDROME.

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**Objectives:** Neurological examination of stressed dogs is often difficult. The aim of this study is to evaluate the hind limb myotatic reflexes of dogs with thoracolumbar syndrome after intramuscular administration of dexmedetomidine.

**Methods:** Hindlimbs spinal reflexes (patellar, flexion, ischial, tibial) in dogs referred to the Companion Animal Clinic with thoracolumbar syndrome were evaluated. Dexmedetomidine 180 µg/m<sup>2</sup> was administered intramuscularly and the reflexes were reevaluated 30' later. Angle changes formed by the stifle and tarsal joints before and after dexmedetomidine administration was assessed. Stress level changes and sedation degree during neurological examination were also evaluated.

**Results:** Nine dogs with thoracolumbar syndrome of severity 2 or 3 or 4 (scale 0-5) were evaluated. Mean sedation score was 6/17 after dexmedetomidine administration, which is considered moderate degree of sedation making it easier to manage them and perform the reflexes. When comparing the final stifle and tarsal angles formed before and after dexmedetomidine administration, a slight increase was found. However, differences between the angles were not statistically significant. Subsequently, localization was not altered.

**Conclusions:** Administration of dexmedetomidine intramuscularly in dose of 180 µg/m<sup>2</sup> can be used as an alternative for sedation in dogs with thoracolumbar syndrome without affecting the neuroanatomical localization of the lesion.

### Literature:

Horsley, K. T., Olby, N. J., Mitchell, M. A., Aulakh, K. S., & Gines, J. A. (2021). Effect of Sedation on the Neurological Examination of the Patellar and Withdrawal Reflexes in Healthy Dogs. *Frontiers in Veterinary Science*, Vol. 8.

Mouzakitis, I. (February 2014). Master's Thesis: Assessment of Patellar Reflexes and Flexion under sedation in Clinically Healthy Dogs and Dogs with Thoracolumbar Syndrome. School of Veterinary Medicine, Aristotle University of Thessaloniki.





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## INVESTIGATING *DIROFILARIA* SPP TRANSMISSION DYNAMICS IN ATTICA REGION: IMPLICATIONS FOR VETERINARY HEALTH

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**Objectives:** *Dirofilaria* spp a vector-borne parasite transmitted by mosquitoes, poses significant threat to both animal and human health. Our study aimed to explore the transmission dynamics of *Dirofilaria* spp in the Attica region, where clinical observations suggested that the parasite was not circulating.

**Methods:** Over a two-year period, we conducted comprehensive surveillance targeting both mosquito vectors and canine populations, to assess the risk of *Dirofilaria* spp transmission in the region. During the first study year, blood fed *Culex pipiens* mosquitoes were collected from an already established and operating extensive mosquito trap network across Attica. Pooled mosquito samples were molecularly analysed for the presence and genotyping of parasites' DNA. In addition, serological analyses (i.e., ELISA) were performed on samples from stray dogs of this region, for the presence of parasites' antibodies. This initial phase provided crucial insights into the prevalence of *Dirofilaria* infection in both vector and canine populations. Thus, in the subsequent year, our study focused to specific locations where positive mosquito or/and canine samples were identified, to gain a deeper understanding of local transmission patterns. For this, blood fed mosquitoes collected all year and serum samples from domestic dogs were analysed as previously described.

**Results:** Our findings revealed a low prevalence (10%) of *Dirofilaria* positive mosquitoes, during the first year, slightly increased to 15% in the second year. Similarly, serological analysis of stray dogs showed very low prevalence of circulating antibodies against *Dirofilaria*. For the domestic dogs, only one was found positive.

**Conclusions:** Although these results suggest a minor risk of *Dirofilaria* transmission in the study area, our study underscores the importance of ongoing surveillance and vigilance. Climate change and other environmental factors may alter the dynamics of mosquito-borne diseases, potentially leading to a *Dirofilaria* transmission emergence in this region in the future. Therefore, continued monitoring and preventive measures are essential to safeguard both animal and human health in the Attica region.





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## EFFECT OF DIFFERENT STORAGE CONDITIONS ON CHANGES IN PROTEIN AND CREATININE CONCENTRATION IN URINE

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**Objectives:** Urinalysis is a routine and widely used procedure in veterinary medicine of small animals. In combination with a blood test, a comprehensive and valuable overview of the patient's current health state is obtained. Protein and creatinine are important urinary chemical parameters and their ratio (UPC) is widely used for quantification of proteinuria in dogs and cats. The storage condition of samples is an important factor influencing the final results of laboratory testing. Inappropriate storage conditions may cause analyte degradation, which may lead to incorrect result interpretation. In the case of urinary protein and creatinine, many published papers address this issue, but they are not completely consistent in their results. Our study aimed to evaluate the effect of long-term storage on the change in urinary protein and creatinine concentrations.

**Methods:** Urine from 17 clinically healthy dogs of different breeds and sexes was used for this experiment. The following temperature conditions were evaluated: 22 °C (room temperature), 4 °C (fridge), -20 °C (freezer), and -80 °C (deep freezer) for different periods ranging from 1 day to 6 months. The fresh samples were also analyzed.

**Results:** The urinary protein remained stable for two days at laboratory temperature (22 °C), one week in the fridge (4 °C), one month in the freezer (-20 °C) and six months in the deep freezer (-80 °C). Creatinine appears to be a more stable parameter, as no significant changes ( $p > .05$ ) were detected throughout the storage period (i.e., 6 months) at -20 °C and -80 °C compared to the fresh samples. Creatinine was also stable for two days at laboratory temperature (22 °C) and one week in the fridge (4 °C).

**Conclusions:** Our results may improve the knowledge of urine sample stability, which may be important for laboratories and veterinarians who frequently work with this biological material.





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## SEROLOGICAL AND MOLECULAR DETECTION OF *TOXOPLASMA GONDII* IN CATS IN EUROPE WITH EVALUATION OF ASSOCIATED RISK FACTORS FOR PATHOGEN CONTACT/INFECTION

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**Objectives:** *Toxoplasma (T.) gondii* is an obligatory intracellular coccidian pathogen with domestic cats and other Felidae as specific definitive hosts. Aims of the study were to identify risk factors for positive test results.

**Methods:** The database of a laboratory was screened for results of *T. gondii* polymerase chain reaction (PCR) out of faeces and serology out of serum/plasma (Immunoglobulin M (IgM), Immunoglobulin G (IgG)) in cats in Europe from 01/2008-12/2022. Logistic regression analysis was performed to identify risk factors for positive results (breed, age, sex, castration status, regionality, seasonality, feline leukemia virus [FeLV]- and feline immunodeficiency virus [FIV]-status), and Odds ratios (ORs) were calculated.

**Results:** 45523 cats were included, 14500 (31.9%) tested positive by direct and/or indirect detection methods for *T. gondii* (PCR: 126/7896 [1.6%], IgG: 14148/37882 [37.3%], IgM: 1539/37882 [4.1%]). Age > years (IgG: OR=2.591/P<0.001, IgM: OR=1.954/P<0.001), European Shorthairs/mixed breeds (IgG: OR=3.848/P<0.001, IgM: OR=2.152/P<0.001), male sex (IgG: OR=1.134/P<0.001), castration status in males (IgG: OR=0.536/P<0.001) and females (OR=0.577/P<0.001), FeLV antigen positivity (IgG: OR=1.358/P=0.030), and FIV antibody positivity (IgG: OR=2.350/P<0.001, IgM: OR=2.650/P<0.001) significantly impacted serological results. In PCR testing, castration status had a significant impact in males (OR=2.455/P=0.002) and females (OR=2.988/P<0.001). Serological and PCR results were significantly influenced by regionality for IgG (central: OR=1.454/P<0.001, north: OR=0.768/P<0.001, south: OR=0.526/P<0.001, east: OR=0.768/P<0.001, west: OR=0.709/P<0.001), IgM (central: OR=0.616/P<0.001, north: OR=1.456/P<0.001, south: OR=1.767/P<0.001, east: OR=1.456/P<0.001), and PCR testing (central: OR=0.460/P<0.001, north: OR=3.020/P=0.002, east: OR=3.020/P=0.002). Seasonality had a statistically significant impact on IgM (summer: OR=1.402/P<0.001, winter: OR=0.732/P<0.001) and PCR testing (autumn: OR=1.473/P=0.038).

**Conclusions:** Breed, age, sex, castration status, seasonality, and regionality significantly impacted serological results. Castration status, seasonality, and regionality significantly impacted results of PCR testing. Immunosuppression (FeLV/FIV) had a significant impact on serological results. PCR positive cats shed oocysts and spread infection to other susceptible host as humans. Surveillance is therefore recommended taking the associated risk factors into consideration.





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## EVALUATION OF SURGICAL TRAINING USING CADAVERS PRESERVED IN A 30% SODIUM CHLORIDE SOLUTION

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**Objectives:** Surgical Technique classes are an important part of the veterinary medicine course for student training in surgical procedures and topographic anatomy study. Practice on cadavers is one of the methods for teaching veterinary surgery maintaining anatomic reality and avoiding procedures on live animals. The present study aimed to evaluate the advantages of surgical training on cadavers preserved with the 30% saline solution preservation method.

**Methods:** For this purpose, eight frozen cadavers (5 dogs and 3 cats) were collected from the Veterinary Hospital of University of Brasilia. After gradual defrosting those, a solution of 95% ethyl alcohol with 5% glycerin was used to wash the circulatory system, and a fixation solution (200g/L of sodium chloride, 10g/L of sodium nitrite, and 10g/L of sodium nitrate) was infused in the external common carotid artery. A group of 10 experienced veterinary surgeons performed enterotomy, ovariosalpingohysterectomy, cystotomy, partial splenectomy, surgical hepatic biopsy, and reconstructive procedures on the animals and then, they answered a questionnaire.

**Results:** Regarding the cadaver appearance, 60% (n=6) of the surgeons considered it "better than expected" and the other 40% (n=4) considered it "adequate/apropriate, within expectations". 80% (n=8) considered the organs consistency a positive point. As for the skin elasticity for reconstructive procedures, 90% (n=9) considered it "Good", and 10% (n=1) rated it as "Bad".

**Conclusions:** In the present study, all surgeons (n=10) considered the practicing surgical training on preserved cadavers to be "good", due to the more natural coloration and consistency of most parts of the organs, as well as mild odor than thawed specimens.





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**EFFICACY OF A CANDIDATE VACCINE AGAINST *LEISHMANIA INFANTUM* ON NATURALLY EXPOSED DOGS TO SANDFLIES.**

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**Objectives:** The aim of this study was to determine the efficacy of a Leishmania candidate vaccine administered to dogs kept in an open-kennel under controlled conditions and naturally exposed to the sandfly vector, *Phlebotomus* spp. during three sandfly seasons.

**Methods:** One hundred, male (n=47) and female (n= 53) healthy and fully vaccinated beagle dogs, aged 6 to 10 months old, were enrolled and randomly allocated to 2 treatment groups: (i) vaccinated (n=50) and (ii) control (n=50). Vaccination was consisted of 3 primary vaccinations (days 0, 21 & 42), during which dogs remained at a BL-2 facility protected from the sandflies, following by 2 annual boosters during the exposure phase. General health of the animals was observed daily, while bone marrow aspirates, whole blood and serum samples were collected every 3 months. Molecular, serological testing for detection of Leishmania infection as well as cell blood counts were routinely performed. Levels of  $\gamma$ -IFN were measured prior and after annual boosters. At the end of the study the dogs were euthanized, and necropsies were performed.

**Results:** Six vaccinated and 18 control dogs were infected at the end of the study. Parasitic load was up to 89 copies in the bone marrow of vaccinated dogs, while up to 4,407 copies in the controls. Antibodies of the parasite were detected in both groups, while no lesions compatible with leishmaniosis were recorded during necropsies.

**Conclusions:** Overall, the candidate vaccine demonstrated great potential in controlling leishmania infections in dogs.







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## SURGICAL TREATMENT OF CONGENITAL UNILATERAL 4TH DEGREE LATERAL PATELLA LUXATION IN TWO YOUNG FEMALE COCKER SPANIELS ORIGINATING FROM A SAME LITTER

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**Objectives:** Patella luxation is considered as one of the most common orthopaedic disorders affecting the hind limb in dogs. Lateral patella luxation has been related to a significant higher relaxation rate, especially in the congenital forms with concurrent skeletal abnormalities. Our objective is to emphasise the important aspects of correcting the underlying skeletal abnormalities linked to laterally luxated patella. Our understanding of the surgical treatment in patella luxation is that only by realignment of the quadriceps/patella axis to the femur/tibia axis, an appropriate patella tracking can be established leading to a stable patella.

**Methods:** Two female cocker spaniel dogs with age of 10 months, originating from a same litter have been presented with grade 4 lateral patella luxation and complete non weight bearing with the affected limbs. In both dogs, only the left stifle joint was affected. Both dogs have had a CT for analysing the underlying skeletal abnormalities and detailed preoperative surgical planning. In both dogs it have been identified an internal tibial torsion, relative shortening of the quadriceps mechanism and hypoplastic femoral condyle with convex femoral trochlea. The surgical treatment consisted of combination of bony and soft tissue procedures and it was identical for both cases. With the dog in a dorsal recumbency, a midline skin incision was applied from above the patella to the distal tibia. The mid shaft of the tibia was approached medially and an osteotomy jig was applied in such a way, so the pins are perpendicular to the tibial axis and inserted to an angle corresponding to amount of the torsional deformity. After a mid-shaft transverse osteotomy, a 2.7mm DCP plate (Mikromed) was applied after correcting the torsional deformity. Shortening of the femur was performed after medial approach to the distal femur and removal of approximately 5-10% femoral segment. The osteotomy was stabilised using a medially applied locking plate (mini distal femur plate, IntraumaVet). Additionally, a trochlear prosthesis (TRA, Innoplant) was applied for providing an adequate trochlear contact between the patella and the femur. The dogs were evaluated at 15, 30 and 45 days after surgery in order to check for degree of lameness, stability of the patella, stifle joint range of motion and bone healing activity.

**Results:** In both dogs we succeeded providing patella stability, improved range of motion and improved lameness score even in a short term after surgery.

**Conclusions:** We support the statement that patella luxation is not a disease "per se" and addressing the underlying skeletal abnormalities is an important aspect of the surgical treatment. In addition, patella stability requires a healthy and adequate in depth femoral trochlea and in our cases a trochlear prosthesis was the choice for achieving that. The unique aspect of our small case series was the fact that both dogs originated from a same litter and have had

### Literature:

Kalff S et al. Lateral patella luxation in dogs: a retrospective study of 65 dogs. Vet Comp Orthop Traumatol. 2014;27(2): 130-4





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Dutra da Silveira S. Femoral corrective osteotomy associated with trochlear prosthetics and tibial tuberosity transposition with a tool for treatment of canine patellar dislocation. Acta Veterinaria Brasilica 15(1):25-29

Petazzoni M. Patellar luxation: when the tibia is guilty (Assessment of the tibia in dogs with MPL). ESVOT 2011, Lyon

Piermattei D.L., Johnson K.A (2004). An atlas of surgical approaches to the bones and joints of the dog and cat. 4.ed., Philadelphia: Saunders





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## TRANSORBITAL POST-CARUNCULAR ENDOSCOPIC SURGERY COMBINED WITH THE USE OF FLUOROSCOPY FOR THE RETRIEVAL OF A BULLET WITHIN THE RIGHT RETROBULBAR SPACE IN A 2-YEAR-OLD MALE DOMESTIC SHORT HAIR

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**Case description:** A 2-year-old male neutered domestic short hair cat presented for investigation of a head shot injury that occurred a few days prior to presentation. Radiographs of the head confirmed the presence of a bullet in the facial region. On clinical examination, the cat had a small wound on the dorsal aspect of the nasal planum. General clinical examination was otherwise within normal limits. Ophthalmologic examination revealed mild anisocoria. Computed tomography of the head confirmed the presence of the bullet within the right retrobulbar space, nasal fractures, a calvarial fracture, and secondary pneumocephalus. The cat was medically treated with a month-long course of amoxicillin-clavulanic acid and clindamycin for suspected infectious meningitis. Surgical treatment was delayed until the calvarial defect had sealed and the pneumocephalus resolved. Computed tomography of the head was performed after the completion of the course of antibiotics. Imaging confirmed resolution of pneumocephalus, retro-bulbar and meningeal contrast-enhancement. The calvarial and nasal cavity defects persisted but were reduced in size. Transorbital post-caruncular endoscopy with a rigid 1.9 mm scope was performed. The bullet was visualised and associated shrapnel flushed out. The bullet was finally removed with the aid of intra-operative fluoroscopy and direct retrieval through the same minimally invasive conjunctival approach. A temporary tarsorrhaphy was applied until the peri-ocular swelling resolved. The cat was discharged with course of oral marbofloxacin (2 mg/kg PO SID) for 2 weeks, meloxicam (4 kg dose PO SID) for 7 days, and gabapentin (10 mg PO BID) for 7 days. Ten days post-surgery, the cat had made a full recovery. Transorbital post-caruncular endoscopy has been reported in a dog<sup>1</sup> before but has never been attempted in cats. The retrieval of the bullet was successfully performed in this cat by a combination of transorbital post-caruncular endoscopy and fluoroscopy.





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## THORACIC DUCT LIGATION AND SUBTOTAL PERICARDIECTOMY IN A CAT WITH IDIOPATHIC CHYLOTHORAX

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**Case description:** Chylous effusions result from a loss of integrity of lymphatic drainage from the gastrointestinal tract into the cranial vena cava. Despite extensive diagnostic workups, the underlying etiology remains unclear (e.g., idiopathic chylothorax). Our objective is to emphasize the non-specificity of the first clinical presentation and the importance of combined thoracic duct ligation with subtotal pericardiectomy as a treatment plan. A 4-year-old male intact DSH cat, weighing 5 kg, was referred to the Companion Animal Clinic of the University of Thessaloniki with a history of dyspnea and chronic cough due to pleural effusion. Clinicopathologic examination revealed idiopathic chylothorax. The cat underwent right lateral thoracotomy for subtotal pericardiectomy and thoracic duct ligation following methylene blue injection into a mesenteric lymph node. During surgery, the existing chylous effusion was removed, the thoracic cavity was lavaged, and the cat recovered well and was discharged 6 days after surgery. One month after surgery the cat was admitted with a history of tachypnea and underwent thoracentesis for the removal of residual chylous effusion. He was urgently admitted to the NICU, where he underwent thoracocentesis and Three months after surgery the cat is doing well apart from some episodes of coughing. On follow-up, the cat is stable without any clinical signs of dyspnea or findings in the last thoracic x-rays.

In feline idiopathic chylothorax surgical intervention, and especially the combination of thoracic duct ligation and subtotal pericardiectomy, is an excellent therapeutic option.

### Literature:

Dempsey S.M. (2011). A Review of the Pathophysiology, Classification, and Analysis of Canine and Feline Cavitory Effusions. JAAHA 2011; 47:1–11.

Fossum T.W. et.al. (2004). Thoracic Duct Ligation and Pericardiectomy for Treatment of Idiopathic Chylothorax. JVIM 2004;18: 307-310. Fossum T.W. (2019). Surgery of the Lower Respiratory System: Pleural Cavity and Diaphragm. Small Animal Surgery 5th ed., Philadelphia: Elsevier, pp 916-955.

Singh A., Brisson B., Nykamp S. (2012). Idiopathic Chylothorax in Dogs and Cats: Nonsurgical and Surgical Management. Compendium 2012, 34:8.





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## A PRELIMINARY REPORT ON THE DETECTION OF ESBL/AMC PRODUCING *ESCHERICHIA COLI* IN STRAY DOGS IN ATTICA

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**Objectives:** The close contact between pets and humans creates the best bridge for interspecies transmission of multidrug-resistant (MDR) bacteria. There is a lack of data concerning the presence of antibiotic resistant Enterobacteriaceae in stray dog population in Greece. The aim of this research is to evaluate the presence of *Escherichia coli* resistant to third generation cephalosporin isolated by stray dogs in Attica before their entrance in an intermunicipal shelter.

**Methods:** Rectal swab specimens collected from February to April 2024 from 31 stray dogs just after dogs' capture and arrival at the shelter. Dogs tested did not receive previous antimicrobial treatment. Collected specimens were tested using selective media supplemented by 3rd generation cephalosporin (cefotaxime). *Escherichia coli* colonies resistant to cefotaxime tested for antibiotic resistance/sensitivity and the presence of resistant *Escherichia coli* strains expressed as the ratio of the enumerated *Escherichia coli* strains resistant to cefotaxime to the total enumerated *Escherichia coli* strains detected in each specimen. The resistance genes were detected by PCR.

**Results:** *Escherichia coli* resistant to third generation cephalosporins was detected in two out of 31 collected rectal specimens (6,5%). The first *E.coli* isolate, detected at a percentage 0,64%, was also resistant to penicillins, penicillin/inhibitor combinations and cefoxitin and was identified as a CMY-2 type producer. The second isolate, detected at a percentage 0,16%, was also resistant to penicillins, 4th generation cephalosporins, gentamicin, chloramphenicol, streptomycin, ciprofloxacin and was identified as a CTX-M-9 group producer. No carbapenem resistance was detected.

**Conclusions:** Rates of 3rd generation cephalosporins resistant intestinal carriage detected in stray dogs in Attica is equivalent to rates determined by relevant studies conducted in Italy and South Korea but scant to the rates determined in Argentina and Brazil. Nevertheless, the presence of AmpC and ESBL encoding genes in rectal samples collected by stray dogs is of both public health and animal health concern.





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## AN ATYPICAL MANIFESTATION OF DANCING DOBERMAN DISEASE - CASE REPORT

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**Objectives:** Dancing doberman disease is an enigmatic, inherited neuromuscular disorder affecting Doberman pinschers sometimes also referred to as paroxysmal dyskinesia. This chronic, progressive disease is known for affecting mainly gastrocnemius muscles. The aim of the study was to present an atypical presentation of doberman dancing disease with partial laryngeal paresis.

**Methods:** One and half year old, castrated female Doberman Pinscher was presented with progressive signs of hind limb weakness, flexing and extending of pelvic limbs while standing, coughing while drinking and periodic salivation. Routine blood testing, computed tomography of the chest, acetylcholine receptor antibodies titer, vector diseases titers, electrodiagnostic testing and laryngoscopy was performed.

**Results:** Electromyography revealed positive sharp waves and fibrillations in gastrocnemius muscles. In addition, electroneurography showed an amplitude decrease in M waves of the sciatic/tibial nerve bilaterally. Laryngoscopy showed partial laryngeal paresis and CT of the chest was consistent with multiple post-inflammatory lesions. Other results were unremarkable.

**Conclusions:** Presented case may suggest multiple peripheral nerve involvement in the course of the dancing doberman disease which might reflect features of polyneuropathy. However, these findings should be interpreted with caution due to lack of histopathological examination. Additionally, coexistent neuromuscular disease in the individual could not be ruled out. Our findings may help to further understand this enigmatic disease.

### Literature:

Cerda-Gonzalez S, Packer RA, Garosi L, Lowrie M, Mandigers PJJ, O'Brien DP, VolkHA. International veterinary canine dyskinesia task force ECVN consensusstatement: Terminology and classification. *J Vet Intern Med.* 2021May;35(3):1218-1230. doi: 10.1111/jvim.16108. Epub 2021 Mar 26. PMID: 33769611;PMCID: PMC8162615.

Curtis W. Dewey, Ronaldo C. da Costa. Practical guide to canine and feline neurology, 3rd Edition Suraniti, A., Gilardonì, L., Guerrero, J., Fariña, J., Darman, C., & Fidanza, M. (2007). Clinical manifestations of dancing Doberman disease.





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