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CLINICAL MANAGEMENT OF CONJUNGTIVITIS AND RHINITIS IN A HIMALAYAN CAT: A CASE REPORT

Laporan Kasus: Penanganan Konjungtivitis dan Rinitis pada Kucing Himalaya

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Abstract

The current upward trend in keeping purebred cats is accompanied by a high risk of disease, including respiratory and eye infections such as conjunctivitis. conjunctivitis and rhinitis are components of the feline upper respiratory tract disease, which commonly occurs in cats, particularly in brachycephalic breeds such as the Himalayan cat. The shortened facial structure and narrowed nasal passages characteristic of this breed predispose them to infections and inflammation of the mucosal surfaces. This case report aims to describe the management of bacterial conjunctivitis and rhinitis in a 1.5-year-old male Himalayan cat weighing 1.75 kg, presenting with clinical signs of sneezing, ocular discharge, and nasal discharge. Clinical examination, hematological analysis, cytology, bacterial culture, rapid testing for Feline Herpesvirus and radiography were performed to establish the diagnosis. Hematological findings revealed lymphocytosis, granulocytopenia, and macrocytosis. Cytological examination and bacterial culture of ocular and nasal swabs identified the presence of *Staphylococcus* sp. and *Enterococcus* sp., while the FHV rapid test yielded negative results. The treatment protocol consisted of topical and oral antibiotics, systemic corticosteroids as anti-inflammatory therapy, and supportive treatment in the form of multivitamin supplementation. Clinical improvement was observed on the third day of treatment, and complete recovery was achieved by the seventh day, as indicated by the resolution of sneezing and ocular and nasal discharge. Based on these findings, appropriate and integrated management provides a favorable prognosis in cases of bacterial conjunctivitis and rhinitis in Himalayan cats.

Keywords: Conjunctivitis; Himalayan cat; Rhinitis; *Staphylococcus* sp

Abstrak

Peningkatan tren pemeliharaan kucing ras saat ini sebanding dengan tingginya risiko penyakit,

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salah satunya infeksi saluran pernapasan dan mata seperti konjungtivitis. konjungtivitis dan rinitis merupakan bagian dari penyakit saluran napas atas kompleks yang sering terjadi pada kucing, terutama pada ras *brachycephalic* seperti kucing Himalaya. Struktur anatomi wajah yang pendek dan saluran nasal yang sempit menyebabkan ras ini lebih rentan terhadap infeksi dan inflamasi mukosa. Laporan kasus ini bertujuan untuk melaporkan penanganan konjungtivitis dan rinitis bakteri pada seekor kucing Himalaya jantan berumur 1,5 tahun dengan bobot badan 1,75 kg yang menunjukkan gejala bersin, leleran mata, dan pilek. Pemeriksaan klinis, hematologi, sitologi, kultur bakteri, tes FHV Ag, dan dilakukan untuk menegakkan diagnosis. Hasil pemeriksaan darah menunjukkan limfositosis, granulositopenia, dan makrositosis. Pemeriksaan sitologi dan kultur bakteri dari *swab* mata dan hidung mengidentifikasi adanya bakteri *Staphylococcus* sp. dan *Enterococcus* sp., sedangkan uji FHV menunjukkan hasil negatif. Terapi yang diberikan meliputi antibiotik topikal mata dan oral, kortikosteroid sistemik sebagai antiinflamasi, serta terapi suportif berupa multivitamin. Perbaikan klinis mulai terlihat pada hari ketiga pengobatan dan kesembuhan dicapai pada hari ketujuh, ditandai dengan hilangnya bersin dan sekret okuler serta nasal. Berdasarkan hasil tersebut, penanganan yang tepat dan terintegrasi memberikan prognosis yang baik pada kasus konjungtivitis dan rinitis bakteri pada kucing Himalaya.

Kata kunci: Konjungtivitis, Kucing Himalaya, Rinitis, *Staphylococcus* sp.

INTRODUCTION

Conjunctivitis and rhinitis are the most frequently encountered upper respiratory tract disorders in cats, particularly in brachycephalic breeds such as Persian-Himalayan cats. Their short facial structure and narrow nasal passages render them more susceptible to mucosal infection and inflammation (Gaskell *et al.*, 2012). Conjunctivitis is defined as inflammation of the palpebral and bulbar conjunctiva, clinically characterized by hyperemia, serous to mucopurulent ocular discharge, blepharospasm, and epiphora (Maggs *et al.*, 2015). In cats, rhinitis is an inflammation of the nasal cavity mucosa that induces clinical signs such as sneezing, serous or purulent nasal discharge, nasal obstruction, and olfactory impairment (Reed, 2014).

Conjunctivitis and rhinitis frequently co-occur as components of feline upper respiratory tract disease due to the interconnected anatomical structures and respiratory mucosa. The primary etiology of conjunctivitis and rhinitis in cats involves infectious agents, predominantly Feline herpesvirus-1 (FHV-1), which induces mucosal epithelial damage and local inflammatory responses (Gaskell & Dawson, 2011).

Feline herpesvirus-1 exhibits high tropism for the conjunctival epithelium and nasal mucosa, commonly resulting in conjunctivitis and rhinitis; it can also establish latency and recrudesce, particularly under stressful conditions (Maggs *et al.*, 2015). The clinical manifestations of conjunctivitis and rhinitis in Himalayan cats can be either acute or chronic. If left untreated, these conditions can lead to permanent mucosal damage and a decline in the animal's quality of life (Reed, 2016). Therefore, a comprehensive understanding of the pathogenesis, breed-specific predisposing factors, and the correlation between conjunctivitis and rhinitis in Himalayan cats is essential to support accurate diagnosis and appropriate clinical management.

MATERIAL AND METHODS

Signalement and Anamnesis

The subject of this case report was a 1.5-year-old male black-and-white Himalayan cat weighing 1.75 kg. The patient presented with a yellowish-green ocular discharge that had persisted for three weeks. Additionally, the cat had been experiencing sneezing and nasal discharge since one week prior. The patient was co-housed with 18 other cats and five dogs;

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however, according to the owner, only the subject animal exhibited clinical signs of illness. There was no history of prior medical intervention, and the owner had only routinely cleared the discharges using tissue paper. In terms of husbandry, the cat was permitted outdoor access within the residential yard. The diet consisted of commercial dry food provided twice daily, with normal appetite and water intake. The patient was reported to be up-to-date on both vaccinations and anthelmintic treatments.

Physical Examination and Clinical Sign

The cat in this case had a Body Condition Score (BCS) of 3/9, characterized by ribs that were easily palpable with minimal fat cover, clearly visible lumbar vertebrae, a well-defined abdominal tuck behind the ribs, and minimal body fat (Teng *et al.*, 2018). The patient's temperament was quiet, with a defensive demeanor evidenced by frequent scratching at the examination table. Physical examination included palpation of the regional lymph nodes to assess for enlargement indicative of inflammation, as well as evaluation of the capillary refill time (CRT). Auscultation of the thorax was also performed to evaluate the circulatory and respiratory systems.

Hematology Examination

Following the physical examination, a hematological evaluation was performed. Blood samples ($\pm$ 0.5 mL) were collected from the cephalic vein and transferred into an EDTA tube. The obtained blood was then stored in a transport medium containing ice. A complete blood count (CBC) was performed at the Udayana University Veterinary Teaching Hospital using an automatic hematology analyzer (RT-7200, PT. Whira Pitoe Usaha Bersama, East Jakarta, Indonesia).

Cytological Examination and Bacterial Culture

Ocular and nasal discharges were swabbed for cytological evaluation using Diff-Quik® staining. Because clinical findings indicated a potential bacterial etiology, the swabs were collected from the affected ocular and nasal regions displaying discharge. Microscopic examination was subsequently performed to provide both qualitative and quantitative assessments.

Feline Herpesvirus Antigen (FHV Ag) Rapid Test

Ocular and nasal discharge samples were collected from the patient using a sterile cotton swab to screen for viral involvement. The obtained specimens were subsequently processed using a commercial FHV Ag (Feline Herpesvirus Antigen) rapid test kit in accordance with the manufacturer's instructions. Upon completion of the incubation period, the test yielded a negative result, indicating the absence of detectable viral antigens in the sampled mucosa.

RESULT AND DISCUSSION

Result

Physical Examination

Prior to treatment, the patient presented with a Body Condition Score (BCS) of 3/9 and weighed 1.75 kg. Initial physical examination revealed a dull and shedding hair coat. Evaluation of the mucous membranes showed pale ocular mucosa accompanied by a yellowish-green discharge, while respiratory system assessment noted a prominent nasal discharge (Figure 1). Following the initiation of therapy, the patient's clinical condition improved significantly. By day 3 of treatment, both the ocular and nasal discharges had noticeably decreased. By day 7, the cat showed signs of recovery, characterized by the complete resolution of the ocular discharge

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(Figure 4). Ultimately, post-treatment evaluation demonstrated a substantial recovery, highlighted by an increased BCS of 4/9 and a body weight gain to 2.4 kg (Teng *et al.*, 2018).

Hematological Examination

The results of the complete blood count (CBC) revealed that the patient experienced lymphocytosis, granulocytopenia, and macrocytosis, as detailed in Table 2. The elevated lymphocyte count suggested a chronic antigenic stimulation or a viral-induced immune response, whereas the concurrent decrease in granulocytes indicated an altered white blood cell distribution or consumption due to localized inflammation. Additionally, the presence of macrocytosis pointed toward an altered erythrocyte maturation process or a regenerative bone marrow response during the course of the disease.

Cytological Examination and Bacterial Culture

Microscopic evaluation was conducted utilizing both qualitative and quantitative cytological assessments. Qualitative analysis of the ocular and nasal swabs revealed the presence of cocci bacteria (Figure 2a) alongside inflammatory cells (Figure 2b). Quantitatively, bacterial culture was performed at the Denpasar Veterinary Medical Research Center (Balai Besar Veteriner Denpasar). The culture results demonstrated the isolation of *Staphylococcus* sp. from the nasal swab, while the ocular swab yielded both *Staphylococcus* sp. and *Enterococcus* sp., as detailed in Table 3.

Feline Herpesvirus Antigen (FHV Ag) Rapid Test

A Feline Herpesvirus Antigen (FHV Ag) rapid test was conducted at a veterinary clinic in Bali utilizing ocular and nasal discharge specimens. These diagnostic samples were carefully collected from the patient using a sterile cotton swab to prevent contamination. The assay subsequently yielded a negative result, as demonstrated by the absence of a test line in Figure 3.

Diagnosis dan Prognosis

Based on the anamnesis, clinical findings, and confirmatory diagnostic evaluations—including hematology, bacterial culture, and a Feline Herpesvirus Antigen (FHV Ag) test—the patient was diagnosed with concurrent conjunctivitis and rhinitis. Considering the overall physical condition of the animal and the diagnostic outcomes, the prognosis for recovery in this case was determined to be favorable (fausta).

Therapy

The therapeutic management for the patient involved topical administration of Erlamycetin® ophthalmic ointment (10 mg) applied q12h for 7 days. Systemic antimicrobial therapy was instituted using amoxicillin-clavulanic acid (625 mg) administered PO at a dosage range of 12.5–25 mg/kg body weight q12h for 7 days. To manage inflammation, Sanexon® (methylprednisolone, 4 mg) was administered PO at a dosage of 0.5–1 mg/kg body weight q24h for 5 days. Additionally, a supportive metabolic supplement, Biodin® (100 ml), was administered via intramuscular (IM) injection at a dose of 1 ml once a week.

Discussion

The diagnosis of conjunctivitis and bacterial rhinitis in this patient was established by integrating characteristic clinical signs with a series of supplementary laboratory examinations. Clinical signs, including sneezing, greenish mucopurulent ocular and nasal discharge, combined with the brachycephalic breed anatomy, served as initial indicators of an upper respiratory tract and ocular tissue disorder. To confirm the primary etiology of this disease

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complex—whether triggered by a primary viral infection, opportunistic bacterial multiplication, or a combination of both—the diagnostic evaluation proceeded with viral antigen testing, complete blood count (CBC) profiling, exfoliative cytology, and microbiological culture. This comprehensive approach is crucial to rule out other differential diagnoses and design a targeted therapeutic regimen. As an initial step in investigating the primary causative agent, the evaluation focused on detecting Feline Herpesvirus-1 (FHV-1), which is recognized as the most dominant viral pathogen in similar cases.

The Feline Herpesvirus Antigen (FHV Ag) test utilizing the Fluorescence Immunoassay (FIA) method yielded a negative result. The FIA method is an antigen detection assay that can only identify the virus if an adequate amount of antigen is present on the conjunctival or nasal mucosa. A result is declared negative if the antigen is undetectable or falls below the analytical sensitivity limit of the device. However, antigen tests possess limitations, as they can yield false-negative results if viral shedding is low or intermittent (Greene, 2022). Furthermore, FHV-1 can enter a latent phase within the trigeminal ganglion without producing active viral particles, rendering it undetectable via antigen assays during non-shedding periods (Maggs *et al.*, 2007). Antigen assays also exhibit lower sensitivity compared to Polymerase Chain Reaction (PCR) in detecting low viral loads (Helps *et al.*, 2004).

Unlike herpesviruses, bacterial infections do not possess a true latent phase; however, certain bacteria can enter a dormant state or form biofilms, which arrest active replication and make them difficult to detect via standard culture methods. Persister cells and biofilms allow bacteria to survive within tissues at low metabolic activity rates (Lewis, 2010; Costerton *et al.*, 1999). Intermittent shedding in bacterial infections refers to the non-continuous release of bacteria from the mucosa, with quantities varying depending on local immune status and inflammation. Opportunistic bacteria, such as *Staphylococcus* spp., can fluctuate on ocular and nasal mucosal surfaces, causing culture results to vary at different sampling times (Quinn *et al.*, 2011). Additionally, the quantity of isolated bacteria does not always correlate with clinical severity, as bacterial populations may temporarily spike during active inflammation and decrease as the immune response improves (Greene, 2022). A negative culture result does not definitively rule out an infection, as it can be influenced by sampling techniques, low bacterial load, or prior antibiotic administration (Greene, 2022; Helps *et al.*, 2004).

Supplementary evaluation via a Complete Blood Count (CBC) revealed relative lymphocytosis, granulocytopenia, and macrocytosis (Table 2). Relative lymphocytosis can develop as a subsequent immune response to bacterial antigens, particularly during non-acute phases of infection. Lymphocyte activation reflects the role of the adaptive immune system in maintaining an inflammatory response against persistent bacterial infections (Thrall *et al.*, 2012). The absolute granulocyte count and granulocyte percentage showed a relative decrease, while lymphocyte values increased, which is consistent with subacute to chronic bacterial infections. In some cases, granulocytes may redistribute into inflamed tissues, causing their numbers in peripheral circulation to appear decreased. This condition frequently occurs in localized or chronic bacterial infections, such as those affecting the upper respiratory tract, skin, or mucosal tissues (Stockham & Scott, 2011).

Bacterial culture of the nasal swab led to the isolation of *Staphylococcus* sp. Gani *et al.* (2024) stated that such bacterial infections depend on predisposing factors, including mucous membrane trauma, viral infections, or imbalances in the normal flora. A recent study revealed that the feline nasal cavity comprises a diverse bacterial microbiome (Egberink *et al.*, 2009; Dorn *et al.*, 2017). Bacteria capable of causing infectious rhinitis in animals include *Mycoplasma* sp., *Chlamydophila felis*, *Pasteurella* sp., *Streptococcus* sp., *Staphylococcus* sp.,

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and *Klebsiella* sp. Meanwhile, fungal agents that induce feline rhinitis include *Cryptococcus* spp. and *Aspergillus* spp. (Ramaditya *et al.*, 2018).

According to findings by Berzina *et al.* (2022), differences exist in cytological findings between healthy eyes and those affected by conjunctivitis. The study found that cats with conjunctivitis exhibit higher numbers of epithelial cells, goblet cells, and neutrophils compared to cats with healthy eyes. Based on this, the patient in this case was confirmed to suffer from conjunctivitis due to the abundance of neutrophils, which supported the prior clinical findings. The infection was attributed to bacterial activity. Bacterial conjunctivitis can be caused by infectious agents such as *Staphylococcus* sp., which is known to be an opportunistic ocular pathogen in cats that contributes to conjunctivitis via conjunctival mucosal colonization and the induction of local inflammatory responses (Pramono *et al.*, 2026).

The bacterial culture in this case also revealed the growth of *Enterococcus* spp. These bacteria are Gram-positive cocci physiologically recognized as normal flora of the animal gastrointestinal tract, though they can also be found in small numbers on the skin and mucous membranes (Greene, 2022; Quinn *et al.*, 2011). Consequently, their presence in culture results must be interpreted cautiously to differentiate between active infection, opportunistic colonization, or potential contamination. While *Enterococcus* spp. are generally considered commensal flora, literature has reported cases of feline intraocular infections caused by *Enterococcus faecalis*, where the bacteria were isolated from the aqueous and vitreous humor of animals with endophthalmitis (Donzel *et al.*, 2013). This indicates that *Enterococcus* possesses pathogenic potential toward ocular tissues, particularly under immunocompromised conditions or during hematogenous dissemination from another infectious focus, characterized by mucopurulent secretion at the infection site (Fisher & Phillips, 2009).

A limitation of this case study was the inability to perform definitive diagnostic tests, such as PCR for FHV-1 detection or advanced microbiological evaluations. Consequently, the primary etiology of the rhinitis and conjunctivitis could not be definitively confirmed, and the diagnosis remained based on the clinical approach and available diagnostic results. Patient management was performed by administering causative agents, namely Erlamycetin® ointment and amoxicillin-clavulanic acid, symptomatic treatment with methylprednisolone, and supportive multivitamin therapy. Erlamycetin® ophthalmic ointment (PT. Erela, Semarang, Indonesia), which contains chloramphenicol, was applied because the ocular exudate appeared severe, indicating the necessity for topical antibiotics. In conjunctivitis therapy, the use of broad-spectrum topical antibiotics is highly recommended; thus, chloramphenicol was selected as the first-line treatment (Watson *et al.*, 2018). Chloramphenicol exerts a bacteriostatic effect by binding to the 50S ribosomal subunit of susceptible bacteria, thereby inhibiting bacterial protein synthesis (Plumb, 2023).

Amoxicillin-clavulanate acid was selected as the systemic causative therapy. Amoxicillin is a broad-spectrum beta-lactam antibiotic derived from penicillin that works by inhibiting crucial enzymes involved in bacterial cell wall synthesis, subsequently leading to bacterial cell lysis. Clavulanic acid acts as a bacterial beta-lactamase enzyme inhibitor, which prevents the hydrolysis of amoxicillin or other penicillins by beta-lactamase (Huttner *et al.*, 2020). Olajuyigbe *et al.* (2017) reported that combining amoxicillin and chloramphenicol causes a significant reduction in the minimum inhibitory concentration (MIC) and produces a synergistic effect against various bacteria, meaning the combination can work more effectively than using each antibiotic separately. In concurrent ocular and respiratory infections, topical antibiotics like Erlamycetin (chloramphenicol) act directly on the ocular mucosal surface against local bacteria, whereas systemic antibiotics like amoxiclav provide systemic coverage against bacteria that may have invaded deeper tissues or disseminated through the bloodstream.

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Administration of methylprednisolone has been reported to significantly decrease the concentration of pro-inflammatory cytokines, such as TNF-α, IL-6, and IL-8, while increasing IL-10, demonstrating its suppressive effect on systemic inflammatory responses (Celik *et al.*, 2004). Additionally, methylprednisolone has been reported to decrease IL-8 production and leukocyte adhesion molecule expression, thereby inhibiting leukocyte migration to the site of inflammation (Gormley *et al.*, 2003). The administration of methylprednisolone in this case aimed to suppress the excessive inflammatory response on the conjunctival mucosa and nasal passages. Glucocorticoids work by inhibiting the production of inflammatory mediators, as well as reducing vascular permeability and leukocyte migration, thereby decreasing tissue edema and hyperemia (Papich, 2020; Plumb, 2023). In this case, the negative FHV antigen test result supported the cautious use of corticosteroids to control inflammation without increasing the risk of viral reactivation. Monitoring of anti-inflammatory administration is necessary, as long-term use can cause an increase in intraocular pressure, thereby increasing the risk of glaucoma, cataracts, and exophthalmos (Plumb, 2023).

The supportive therapy administered in this case was 1 mL of Biodin®. The administration of Biodin® aimed to support cellular metabolism, mucosal epithelial regeneration, and immune function during the infectious process. Under conditions of inflammation and anorexia, the requirement for B vitamins may increase, meaning supplementation helps accelerate tissue recovery (Kirk, 2019; Suttle, 2010).

During treatment, sneezing and discharges began to subside by day 3, indicating an initial response to the administered therapy. This clinical improvement continued until day 7, at which point the cat achieved full recovery, characterized by the complete resolution of clinical signs. This indicates that the implemented therapeutic management was effective in resolving the infection and optimally supporting the animal's recovery process.

CONCLUSIONS AND SUGGESTIONS

Conclusions

Based on the anamnesis, clinical examination, and diagnostic tests—including hematology, cytology, bacterial culture, and FHV Ag (Feline Herpesvirus Antigen) test—the cat in this case was diagnosed with bacterial conjunctivitis and rhinitis. The identified bacterial agents were *Staphylococcus* sp. and *Enterococcus* sp., with no involvement of Feline Herpesvirus. The management, which comprised causative, symptomatic, and supportive therapies, demonstrated effective outcomes, characterized by significant clinical improvement by the third day and complete recovery by the seventh day of treatment. The success of this therapy indicates that the administered combination treatment was capable of controlling the infection and accelerating the recovery process. Thus, the therapeutic protocol utilized in this case can serve as a reference for clinical practitioners in managing similar cases. The prognosis for this case was declared favorable or *fausta*.

Suggestions

Based on the examination results and the therapy administered, it is recommended that the owner routinely maintain environmental hygiene and sanitation, reduce exposure to irritants such as dust, cigarette smoke, room fresheners, and volatile chemicals, and ensure proper home ventilation to prevent the recurrence of rhinitis and conjunctivitis. Additionally, providing balanced nutrition and immunity-supporting supplements is advised. The owner should also periodically monitor for symptoms and promptly return the animal to the veterinarian if clinical signs such as sneezing, nasal discharge, or excessive lacrimation re-emerge.

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Tables

Table 1. Results of the Physical Examination

No	Parameter	Result	Reference Interval*	Interpretation
1.	Heart Rate (beats/minute)	152	140-220	Normal
2.	Pulse Rate (beats/minute)	152	140-220	Normal
3.	Capillary Refill Time (second)	< 2	< 2	Normal
4.	Respiratory Rate (beats/minute)	40	24-42	Normal
5.	Body Temperature (ºC)	39,2	38,1-39,2	Normal

*Reference: Tilley dan Smith (2015)

Table 2. Result of Complete Blood Count

Parameter	Unit	Result	Reference Interval	Interpretation
WBC	10^3 /µL	14.34	5.5-19.5	Normal
LYM	10^3 /µL	12.33	0.8-7	High
MID	10^3 /µL	0.75	0-1.9	Normal
GRA	10^3 /µL	1.26	2.1-15	Low
LYM	%	86	12-45	High
MID	%	5.2	2-9	Normal
GRA	%	8.8	35-85	Low
RBC	10^6 /µL	6.67	4.6-10	Normal
HGB	g/dL	11	9.3-15.3	Normal
MCHC	g/dL	31.4	30-38	Normal
MCH	pg	16.5	13-21	Normal
MCV	fL	52.6	39-52	High
RDWCV	%	14.3	14-18	Normal
RDWSD	fL	34.4	35-56	Low
HCT	%	35.1	28-49	Normal
PLT	10^3 /µL	145	100-514	Normal
MPV	fL	8.3	5-11.8	Normal
PDW	fL	6.8	10-18	Low
PCT	%	0.121	0.1-0.5	Normal
P-LCR	%	23	13-43	Normal

Abbreviations: WBC: White Blood Cell; Lymph: Lymphocyte; Mid: Mid Size Cell; Gran: Granulocyte; RBC: Red Blood Cell; HGB: Hemoglobin; MCV: Mean Corpuscular Volume; MCH: Mean Corpuscular Hemoglobin; MCHC: Mean Corpuscular Hemoglobin Concentration; RDWCV: Red Cell Distribution Widht Coefficient Variation; RDWSD: Red Cell Distribution Width Standart Deviation; HCT: Hematocrit; PLT: Platelet; MPV: Mean Platelet Volume; PDW: Platelet Distribution Width; PCT; Plateletcrit

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Table 3. Bacterial Culture Result

Code	Type of Sample	Test Result	
		SSP	ENTSP
Nasal Swab	Cat	+	
Eye Swab	Cat	+	+

Abbreviations: SSP : *Staphylococcus* sp.; ENTSP : *Enterococcus* sp

Figures

Figure 1. Clinical condition of the cat showing yellowish-green ocular discharge (black arrow) and nasal discharge (blue arrow).

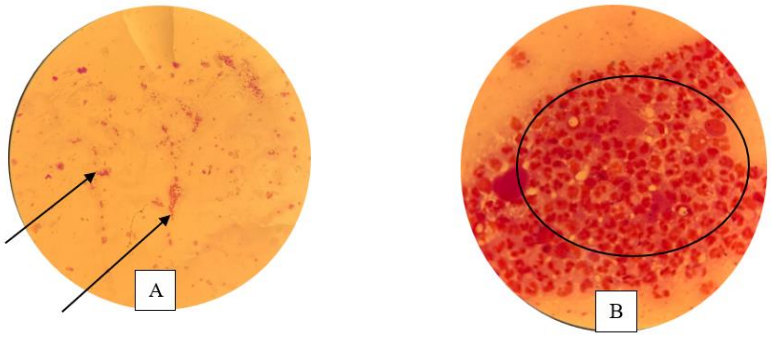

Figure 2. Figure X. Cytological findings of ocular and nasal swabs stained with Diff-Quik (100× magnification). (A) Cocci bacteria (black arrow) observed in the nasal swab, and (B) neutrophils (black circle) present in the ocular swab.

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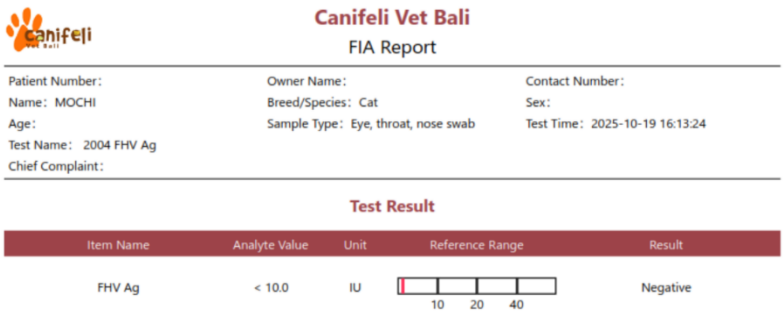

Canifeli Vet Bali

FIA Report

Patient Number:	Owner Name:	Contact Number:
Name: MOCHI	Breed/Species: Cat	Sex:
Age:	Sample Type: Eye, throat, nose swab	Test Time: 2025-10-19 16:13:24
Test Name: 2004 FHV Ag		
Chief Complaint:		

Test Result

Item Name	Analyte Value	Unit	Reference Range	Result
FHV Ag	< 10.0	IU	10 20 40	Negative

Figure 3. The Feline Herpesvirus Antigen (FHV Ag) test via Fluorescence Immunoassay (FIA) was negative.

Figure 4. Clinical observation of the cat on day 7 following the administration of treatment, fully recovered.

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