Diagnosis and treatment of Malassezia dermatitis in a Persian cat

Arvia Chairunnisa¹, Siti Faridha Amalia Ihsanu Nadya¹, Sarasati Windria²,*
Prananda Eka Rifki³, Rahmitiana Wuri³
¹ Veterinary Medicine Professional Program, Faculty of Medicine, Universitas Padjadjaran, Bandung, Indonesia
² Department of Biomedical Sciences, Division of Microbiology, Veterinary Medicine Study Program, Faculty of Medicine, Universitas Padjadjaran, Bandung, Indonesia
³ Zoom Veterinary Clinic, Jalan Golf Barat Raya No. 24, Sukamiskin, Arcamanik, Bandung, Indonesia

ABSTRACT: The presence of Malassezia fungus on the skin, in both normal and excessive amounts, can activate the skin’s immune system in cats. This paper reports a case of a seven-year-old Persian cat named Imo, who presented with eye pain and symptoms of dermatitis during a physical examination. A supporting examination, including a combo test kit and cytology, led to a diagnosis of Malassezia dermatitis. The therapy provided involved cleaning and compressing the wound with a saline solution containing NaCl, administering itraconazole and an oxyfresh water additive, injecting marbofloxacin subcutaneously, and applying vaseline topically. The patient showed noticeable improvement in wound healing within 24 days of hospitalization.

Keywords: Malassezia dermatitis, Persian cat, diagnosis, therapy

INTRODUCTION

The presence of Malassezia fungus on the skin, both in normal and excessive amounts, can activate the skin’s immune system in cats. Malassezia antigens stimulate innate, antibody, and cellular immune responses, and trigger hypersensitivity reactions (Bond et al. 2010). In animals experiencing Malassezia overgrowth or those predisposed to allergic sensitization, the inflammatory response can lead to dermatitis and pruritus (itching), known as Malassezia dermatitis (Guillot et al. 2020). This overgrowth can be triggered by allergies, hormonal imbalances, increased environmental humidity and temperature, sebum quantity and quality, immune dysfunction, and genetic predisposition (Souza 2019). Clinical symptoms of Malassezia dermatitis can vary in dogs and cats and sometimes resemble other skin diseases. Symptoms include erythema, oily and lumpy fur with a blackish-brown color, and itching (pruritus). Malassezia dermatitis in cats can also occur alongside idiopathic facial dermatitis, especially in Persian and Himalayan cats (Guillot et al. 2020).

The diagnosis of Malassezia dermatitis is performed through cytological examination of cells from the skin or ear. Sampling methods include swabs, tape impressions, or dry scrapings, which are then viewed under a microscope. The fungus is identified by its distinctive “footprint” appearance on cytological examination of skin lesions (Souza 2019). This study aims to determine the diagnostic process for Malassezia dermatitis and its therapy on a seven-year-old Persian cat.

CASES

Symptoms and Anamnesis: A 7-year-old solid white Persian cat named Imo was brought to the Zoom Veterinary Team clinic on February 13, 2024, with complaints of eye pain. Physical Examination: The physical examination revealed a body temperature of 38.4°C and a body weight of 4.8 kg. Supporting Examination: A FPV/FCoV/GIA Ag Combo Test was used for examination. Additionally, cytology was performed for microscopic examination. Diagnosis: The cat was diagnosed with giardiasis and Malassezia dermatitis.

RESULT AND DISCUSSION

The examination results using the combo test kit showed positive GIA, negative FCoV, and negative FPV. Microscopic examination revealed the presence of Malassezia dermatitis (Figure 1). Treatment for Malassezia dermatitis in Imo, a Persian cat, began with initial therapy consisting of cleaning and compressing the affected areas with sterile gauze soaked in NaCl-saline, along with administering Rilexine and Amacin. The NaCl-saline solution was used to clean the skin affected by Malassezia dermatitis, helping to remove dirt, crust,
and exudate (inflammatory fluid), and to relieve itching (Wedi 2016). This cleaning was performed twice a day before applying medication.

Figure 1. Supporting examination results show positive GIA accompanied by microscopic appearance of Malassezia.

Rilexine, a non-steroidal anti-inflammatory drug (NSAID), was prescribed to reduce itching and inflammation (Dall'Oglio et al. 2022). It works by inhibiting the cyclooxygenase (COX) enzyme involved in prostaglandin production, which helps reduce itching and inflammation. Additionally, Rilexine can expedite skin healing by increasing blood flow to the affected area and was administered orally twice a day.

Amacin ointment, containing Gentamicin sulfate and Neomycin sulfate, is a topical antibiotic used to treat bacterial infections (Jacobson 2002). In cases of Malassezia dermatitis, secondary bacterial infections can occur due to inflammation and skin barrier disruption, allowing bacteria to enter more easily. Amacin helps by killing the bacteria causing the infection. Treating these secondary infections is crucial to avoid worsening Malassezia dermatitis and to promote healing.

The initial treatment with combination of NaCl-saline, Amacin, and Rilexine for 10 days did not yield significant healing (Figure 2). Therefore, the therapy was adjusted to include Itraconazole, an oxyfresh water additive, injected marbofloxacin as a substitute for Amacin, vaseline, and the discontinuation of Rilexine. Itraconazole, an azole antifungal, inhibits the synthesis of ergosterol, a crucial component of the fungal cell membrane (Rhimi et al. 2021). It was administered orally once a day for 14 days to inhibit Malassezia fungus growth.

■ CONCLUSION

The diagnosis and treatment of Malassezia dermatitis in Imo, a seven-year-old Persian cat, were successfully executed. Initial therapies included NaCl-saline, Rilexine, and Amacin ointment. After limited improvement, the treatment was adjusted to Itraconazole, oxyfresh water additive, marbofloxacin injections, and vaseline application. This resulted in significant healing within 24 days. The approach highlighted the importance of treating both fungal infections and secondary bacterial complications. Continuous observation is essential to prevent recurrence infection.

■ REFERENCES


