International Journal of Veterinary Sciences and Animal Husbandry 2025; 10(11): 231-233

ISSN: 2456-2912
NAAS Rating (2025): 4.61
VET 2025; 10(11): 231-233

www.veterinarypaper.com
Received: 24-09-2025
Accepted: 19-10-2025

R Mahaprabhu
Department of Veterinary Pathology, Veterinary College and Research Institute, Tirunelveli, Tamil Nadu, India

RC Sundararajan
Department of Veterinary Medicine, Veterinary College and Research Institute, Tirunelveli, Tamil Nadu, India

S Jeevanandhi
Research Scholar, Department of Veterinary, Veterinary College and Research Institute, Tirunelveli, Tamil Nadu, India

Corresponding Author:
R Mahaprabhu
Department of Veterinary Pathology, Veterinary College and Research Institute, Tirunelveli, Tamil Nadu, India

A case report on *Malassezia* otitis externa in a three-year-old beagle dog

R Mahaprabhu, RC Sundararajan and S Jeevanandhi

DOI: https://www.doi.org/10.22271/veterinary.2025.v10.i11d.2733

Abstract
A three-year-old male Beagle dog was presented to the Teaching Veterinary Clinical Complex, Veterinary College and Research Institute, Tirunelveli, with a history of itching, erythematous, and waxy ear canals accompanied by tick infestation. Cytological examination of an ear canal swab revealed numerous *Malassezia* organisms, confirming *Malassezia* otitis externa. Serum biochemistry revealed mild alterations, including elevated blood urea nitrogen and bilirubin values. The dog was treated with systemic antifungal therapy (ketoconazole), topical ear drops (Pomisol), antihistaminic (Atarax), tick control (Simparica), and supportive nutritional supplementation (Multistar Pet syrup). Marked clinical improvement was observed after two weeks of therapy. This case highlights the importance of accurate cytological diagnosis and integrated therapeutic management of *Malassezia* otitis externa in dogs.

Keywords: *Malassezia* otitis externa, Pomisol, beagle dog, cytology, ketoconazole, tick infestation, ear infection

Introduction
Otitis externa is a common condition encountered in canine dermatological practice, characterized by inflammation of the external auditory canal. Among the causative agents, *Malassezia pachydermatis* is a lipophilic, commensal yeast that frequently inhabits the skin and ears of healthy dogs. However, it can become opportunistic and pathogenic under favorable conditions such as allergies, ectoparasitic infestations, moisture retention or immunosuppression (Bond *et al.*, 2020) [1].
Beagle dogs are predisposed to otitis externa due to their pendulous ear conformation, which limits air circulation and promotes moisture accumulation. The present report documents a clinical case of *Malassezia* otitis externa in a Beagle dog, with concurrent tick infestation, presented to the Veterinary Clinical Complex, Veterinary College and Research Institute, Tirunelveli, and its successful therapeutic management.

Case History and Clinical Observations
A three-year-old male Beagle dog was presented with a history of intense itching, erythematous ear canal, and waxy discharge for one week. The owner also reported tick infestation on the body.

Clinical Examination
- **Ear canal:** Erythematous, moist, and filled with brownish waxy discharge with a characteristic odor
- **Skin:** Presence of multiple ticks on the head, neck, and ventral abdomen
- No systemic illness or neurological abnormalities were noted.

Diagnostic Investigations
Cytological Examination
An ear canal swab was collected aseptically and stained with Diff-Quik stain.

Microscopic examination under oil immersion (100×) revealed numerous oval to peanut-shaped budding yeast cells, characteristic of *Malassezia* spp., confirming the diagnosis of *Malassezia* otitis externa.

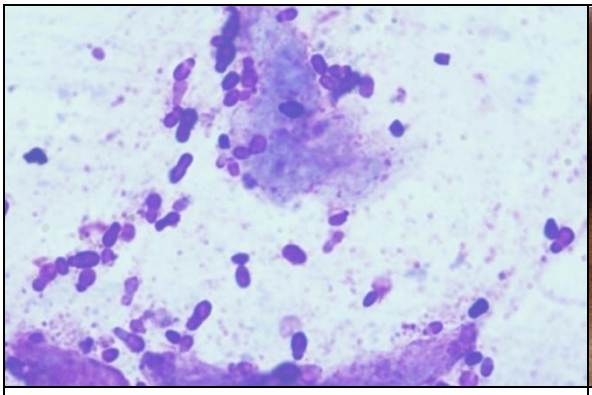

Fig 1: Oval to peanut-shaped budding yeast (*Malassezia* spp)

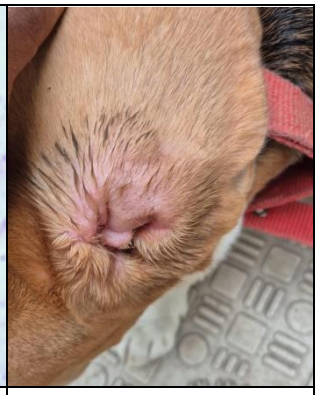

Fig 2: Beagle dog ear canal-fully recovered (absences of erythema and itching)

Serological and Biochemical Findings

Parameter	Observed Value	Reference Range	Interpretation
BUN	32.92 mg/dL	7-27 mg/dL	Mildly elevated
Creatinine	1.37 mg/dL	0.5-1.8 mg/dL	Normal
ALT	23 U/L	10-100 U/L	Normal
AST	33 U/L	10-50 U/L	Normal
Total Bilirubin	0.71 mg/dL	0.1-0.6 mg/dL	Slightly elevated
Direct Bilirubin	0.54 mg/dL	<0.3 mg/dL	Elevated
CK	162 U/L	50-300 U/L	Normal
Calcium	8.017 mg/dL	8-11 mg/dL	Normal
Phosphorus	1.59 mg/dL	2.5-6.0 mg/dL	Decreased

Interpretation

Mild azotemia and hyperbilirubinemia may indicate mild hepatic stress or dehydration associated with systemic inflammation due to otitis and tick infestation. Hypophosphatemia could be secondary to dietary imbalance or mild hepatic dysfunction.

Treatment and Management

Drug	Dosage and Route	Duration	Purpose
Ketoconazole tablet	200 mg orally once daily (SID)	14 days	Systemic antifungal
Pomisol ear drops	4-5 drops in each ear twice daily	14 days	Topical antifungal, antibacterial and anti-inflammatory
Atarax (Hydroxyzine) 25 mg	Orally twice daily (BID)	14 days	Antihistaminic
Simparica (Sarolaner)	Single oral dose as per body weight	One-time	Tick control
Syrup Multistar Pet	5 mL orally twice daily	14 days	Nutritional and hepatic support

Before applying ear drops, the ear canals were gently cleaned with sterile saline and dried. The owner was advised to maintain ear hygiene, avoid water entry, and repeat tick prophylaxis monthly.

Outcome and Follow-up

After two weeks, the dog showed marked improvement with cessation of itching, reduction in erythema, and disappearance of waxy discharge. The ear canals appeared clean and dry on otoscopic examination. Tick infestation was completely eliminated after Simparica administration. Cytological re-evaluation showed a marked reduction in *Malassezia* organisms. The owner reported improved comfort and behavior.

Discussion

Malassezia pachydermatis is an opportunistic yeast normally found on canine skin and mucosa. It becomes pathogenic when host defenses are compromised or when predisposing factors like allergies, moisture, or ectoparasitic infestations are present (Rosser, 2004) [3]. In this case, tick infestation likely served as a triggering factor, leading to excessive scratching and secondary yeast proliferation.

Ketoconazole effectively controlled systemic yeast infection by inhibiting ergosterol synthesis, while Pomisol ear drops provided localized antifungal, antibacterial, and anti-inflammatory effects. Hydroxyzine reduced itching and allergic irritation, and Simparica ensured complete ectoparasite elimination. Multistar Pet syrup supported liver health during antifungal therapy.

The comprehensive treatment approach resulted in complete clinical recovery, demonstrating the importance of addressing both the primary infection and secondary contributing factors.

Conclusion

This case emphasizes that *Malassezia* otitis externa can be effectively managed through prompt cytological diagnosis and integrated therapy combining systemic and topical antifungal treatment, antihistaminic medication, tick control, and supportive care. Regular ear hygiene and ectoparasite

prevention are crucial in avoiding recurrence. Early recognition and comprehensive management ensure a favorable prognosis in *Malassezia* infections in dogs.

Conflict of Interest
Not available

Financial Support
Not available

Reference

1. Bond R, Guillot J, Cabanes FJ. *Malassezia* yeasts in animal diseases. Front Cell Infect Microbiol. 2020;10:83.
2. Nardoni S, Mancianti F, Rum A, Baronti I, Dini M, Sgorbini M, *et al*. Cytological evaluation and antifungal susceptibility of *Malassezia pachydermatis* isolates from dogs. Med Mycol. 2019;57(7):802-809.
3. Rosser EJ. Causes of otitis externa. Vet Clin North Am Small Anim Pract. 2004;34(2):459-468.
4. Mason KV. *Malassezia* dermatitis in the dog. J Am Vet Med Assoc. 1993;202(6):865-868.
5. Bond R. Superficial veterinary mycoses. Clin Dermatol. 2010;28(2):226-236.
6. Dorotea DM, Colombo S, Otsuka M, Ishii M, Kano R. Molecular analysis and pathogenicity of *Malassezia pachydermatis* in canine otitis externa. Med Mycol. 2021;59(4):345-352.
7. August JR. Otitis externa: A disease of multifactorial etiology. Vet Clin North Am Small Anim Pract. 1988;18(4):731-742.
8. Negre A, Bensignor E, Guillot J. Evidence-based veterinary dermatology: A systematic review of interventions for *Malassezia* dermatitis in dogs. Vet Dermatol. 2009;20(1):1-12.

How to Cite This Article
Mahaprabhu R, Sundararajan RC, Jeevanandhi S. A case report on *Malassezia* otitis externa in a three-year-old beagle dog. International Journal of Veterinary Sciences and Animal Husbandry. 2025;10(11):231-233.