Yeast Dermatitis in Dogs & Cats

Nicole A. Heinrich DVM DACVD
McKeever Dermatology Clinics
www.mckeevervetderm.com 952-946-0035

Many types of yeast exist in the world. Yeast to make bread dough rise is called *Saccharomyces.* The yeast that commonly affects humans is called *Candida*, and the yeast that affects dogs and cats is called *Malassezia.* While they are all yeast, they do not all behave in the same way.

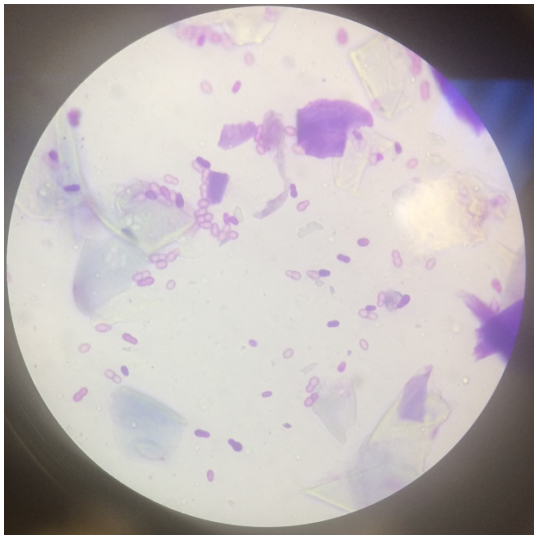
Malassezia is a type of yeast that is naturally present in low numbers on the skin and in the ears of dogs and cats. If the skin and ears are normal, and if the immune system is normal, the yeast numbers remain low. The low numbers of yeast combine with low numbers of bacteria to form the normal flora of the skin and ears. Normal flora protects the skin and ears so that bacteria from the environment does not colonize and infect the body.

If the skin and/or immune system is not normal, then *Malassezia* can overgrow and cause a yeast infection.

In dogs, yeast can overgrow anywhere on the body, but the most common areas are: ears, paws (particularly between the pads and in the claw folds), axillae, ventral neck and perivulvar region. In cats, yeast most commonly overgrows in the ears and on the paws. While these are the areas that are most commonly affected, a yeast infection can occur on any part of the skin.

The most common signs of a yeast infection are: dark brown to black waxy debris in the ears, brown discoloration of the hair, accumulation of brown waxy debris in the claw folds, brown discoloration of the claws and erythema of the skin. More importantly, yeast is very itchy. ***The pruritus caused by a yeast infection does not respond to treatment with allergy medications.*** The only way to resolve the pruritus caused by a yeast infection is to treat the infection directly.

While the clinical signs can give the clinician a high index of suspicion that the patient has a yeast infection, the only way to diagnose the infection with certainty is with cytology. The reason that it is important to perform cytology (**tape preparations** and **ear swabs**) to confirm the diagnosis is that some bacterial infections will mimic a yeast infection.



Malassezia observed through a microscope

Many treatments for yeast infections are available. When choosing a treatment, the clinician must first consider if the patient has any contraindications for a certain treatment such as: co-morbidities, sensitive stomach, receptiveness to topical therapy and other medications that may lead to drug interactions.

The following is a list of common treatments for yeast infections:

Systemic Therapy	**Dose**	**Considerations**
Ketoconazole	5-10mg/kg PO q 12-24 h (typically 5mg/kg PO q 24 h)	Not for use in cats. GI upset is common.
Fluconazole	5-10mg/kg PO q 24 h	Safe in cats. Minimal GI upset.
Terbinafine	Consult a pharmacology textbook	Success rate is variable.
Itraconazole	Consult a pharmacology textbook	
Topical Therapy		
Climbazole	Daily	Douxo® products. Moderate anti-yeast effect
Vinegar:water solution	1 part vinegar to 5 parts water Daily	Mild anti-yeast effect
Athlete's foot spray	Daily	Very effective
Ears		
Terbinafine	Leave-in product	Claro®, Osurnia®. Very effective if the ear is clean.
Miconazole 1% solution	Twice per day	
Clotrimazole 1% solution	Twice per day	Causes irritation rarely
Ketoconazole	Daily to weekly	TrizUltra+Keto®

This list is a quick reference guide only, and a pharmacology textbook should be consulted for complete information. The list is not exhaustive. Topical therapies and systemic therapies sometimes need to be prescribed in combination.

Once the yeast infection has been resolved, proactive steps must be taken to prevent the yeast infection from returning. This may involve regular (i.e. weekly) topical therapy with an anti-yeast product. More importantly; however, the underlying cause of the yeast infection must be determined.

Common causes of yeast infections include: atopic dermatitis, food allergy, hyperadrenocorticism and hypothyroidism. Resolving and preventing yeast infections often makes it easier to manage these other problems.