

Emerging Transmissible Sporotrichosis in Cats

Caused by *Sporothrix brasiliensis*



VETERINARIANS: Be aware that *Sporothrix brasiliensis* causes an emerging disease that spreads from cats to people. It may spread outside of South America.

What is Sporotrichosis?

Sporotrichosis is a fungal infection that can affect humans, cats, and other mammals. It typically causes skin lesions, but it can also spread into the nasal mucosa and lymph nodes and even cause disseminated infections that involve the bones, lungs, or central nervous system.

Sporotrichosis can be caused by certain species of *Sporothrix*, most commonly *S. schenckii* in the United States. Cats typically acquire *S. schenckii* infections when injured skin contacts plant material containing this fungus. However, in Brazil, the species *S. brasiliensis* has emerged as a zoonotic disease that spreads from cats to humans and other animals through bites and scratches of infected cats. This species appears to cause more severe disease among humans and animals than other *Sporothrix* species. It has not yet been detected in North America.

Clinical Features

Feline sporotrichosis can cause a variety of cutaneous and extracutaneous symptoms.

The cutaneous (skin) signs include:

- Single or multiple skin lesions often involving the nasal mucosa (top photo)
- Nodules or skin ulcers, often on the head (other photos)
- Lesions may produce fluid and form crusts

The extracutaneous signs often include:

- Respiratory signs, such as sneezing, nasal discharge, and difficulty breathing
- Swollen lymph nodes
- Cartilage and bone lesions



Diagnosis

Consider *S. brasiliensis* as a cause of unexplained skin lesions in cats, especially among cats in or from Brazil and neighboring countries.

Sporotrichosis is best diagnosed by a culture of clinical specimens. Molecular methods, such as polymerase chain reaction (PCR), can be used to determine the infecting species. Cytology, histopathology, and immunohistochemistry can also be used to detect yeast for preliminary diagnosis.

Treatment

- Itraconazole is the drug of choice for feline sporotrichosis.
- For severe or refractory disease, potassium iodide capsules are typically used in combination with itraconazole.
- Treatment duration is typically at least 1 month after clinical findings resolve.

Prevention and Control

- Veterinarians and animal caretakers should be careful when handling cats with suspected sporotrichosis, since humans have contracted skin, eye, and respiratory infections from contact with infected cats.
- Consider using long-sleeved gowns, gloves, a mask, and eye protection when handling cats with suspected sporotrichosis. When working with cats with multiple skin lesions and respiratory signs, consider using an N95 facial mask.
- Pet owners should limit contact between domestic and feral cats.
- Keep cats with sporotrichosis indoors and away from other cats to avoid further transmission.
- Pet owners and veterinarians should ensure that all pets have the appropriate international health certificates when transporting cats between countries.
- Tell your state or local health department if you detect human or animal cases of sporotrichosis caused by *S. brasiliensis*.

