

Cryptococcus

Maritza Goller, VMD



HISTORY:

“Scrappy” is an about 5-6 year old male neutered domestic short hair cat that presented for evaluation of hair loss and swelling on his nose. Scrappy was a stray cat that was being fed for about 2 months by a family that was interested in taking him inside as a pet.

EXAM:

On his physical exam, he had a semi-firm swelling on the bridge of his nose with associated hair loss. He also had crusted “scab-like” lesions on his tail and left hind leg. Scrappy had good air flow in both of his nostrils and though he sounded “congested”, he did not have any discharge from his nose. Our list of potential causes for the swelling included something infectious (fungal or bacterial disease), a hypersensitivity reaction or cancer (squamous cell carcinoma).

DIAGNOSTICS:

- X-RAY: An X-ray of Scrappy’s skull revealed that there was no obvious bone loss associated with the swelling.
- BIOPSY: Scrappy underwent surgery to have a skin biopsy (small sample of tissue) sent to a laboratory for further evaluation.



RESULTS:

- BIOPSY REPORT: His biopsy required special staining to help identify the possible organism. He had a deep fungal infection that was most likely consistent with Cryptococcus.
- ANTIGEN TESTING: Scrappy had a POSITIVE Cryptococcus titer

WHAT IS CRYPTOCOCCUS?

Cryptococcus is a fungus that can be found in pigeon feces and decaying plant matter of certain trees. It has a worldwide distribution with cats being more likely to become infected than dogs. Infection occurs when an animal inhales the fungus from the environment and is therefore not transmitted directly from animal to animal. Humans are also not at risk of infection from interacting with an infected animal. The primary site of infection in dogs and cats appears to be the nasal cavity, but some animals can have it involve their lungs, skin, brain and spinal cord, eyes, kidneys and liver. Clinical signs of this disease can include sneezing, discharge from the nose, firm swelling over the nose or masses in the nostril. If the eyes are involved, we can see blindness due to changes to the retina. The diagnosis of Cryptococcus can be made by examining tissue from nasal or skin lesions, cerebral spinal fluid or ocular samples. Antigens can be detected in blood, cerebral spinal fluid or urine samples. Treatment of Cryptococcus is with antifungal therapy for at least 6 months. Surgery can also be considered to help reduce the size of certain masses that may be hindering an animals breathing. Prognosis will vary depending on which body systems are involved. Prevention of this fungus is done by restricting access to areas with high concentrations of pigeon droppings.

SCRAPPY'S TREATMENT:

- Scrapy will need anti-fungal medications for about 6 months to a year. We will continue to monitor his titer to ensure it decreases and eventually becomes negative. Scrapy is very lucky to have found a home with such devoted owners!