

TITLE: FIRST CASE OF CRYPTOCOCCOSIS IN FELINES IN MANAUS/AM

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ABSTRACT:

Cryptococcosis is a fungal infection acquired by inhaling resected *Cryptococcus* propagules present in nature, which affects several animals and humans. *Cryptococcus neoformans* and *C. gattii* are the main causative agents of cryptococcosis. In animals, cryptococcosis is observed more in cats than in dogs. In cats, the frequent lesions are cutaneous, located in the nasal cavity and can be easily confused with sporotrichosis or neoplasia. In this study, we describe two cases of cryptococcosis in cats caused by *Cryptococcus gattii*. These are two male, Brazilian shorthair, living in the urban area of Manaus and with free access to street. They had an ulcerated mass throughout the region of planum, bridge and nasal mirror. After anamnesis, blood and tissue were collected for further examination, including mycological culture and cytology. The cytological examination showed the presence of countless yeast forms suggestive of a fungal infection. The fungal culture on Sabouraud and NSA (Niger Seed Agar) agar showed yeast growth and the evaluation of morphology, biochemical tests and chemo-typing in Canavanine-glycine blue-bromothymol agar (CGB) allowed to identify the yeast as *Cryptococcus gattii*. The therapy varied for each animal being Itraconazole used in one and Fluconazole in another. One of the animals remained in treatment and the other one died after a week. In these two cases, direct microscopic examination and culture of sample in culture medium were essential for the correct diagnosis. *C. gattii* infection is more worrisome due to the apparent lack of immunodeficiency of the host for infection to occur. The detection of cryptococcosis in animals plays an important role in public health because these animals serve as sentinels for human exposure. There are cases reported in the

states of Pernambuco, Minas Gerais, Mato Grosso do Sul, Rio Grande do Sul and Mato Grosso, in Amazonas there were no reports of cryptococcosis in cats.

Keywords: Cryptococcosis, Feline, Amazon, *C. gattii*

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