



## **Feline cryptococcosis - case report**

### **Criptococose felina - relato de caso**

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#### **1 INTRODUCTION**

Cryptococcosis is a systemic mycosis of cosmopolitan distribution caused by a fungus of the genus *Cryptococcus*, whose main disease-causing species are *Cryptococcus neoformans* and *Cryptococcus gattii*. The latter mainly affects felines, but can also affect canines, wild animals and humans. The yeast that causes cryptococcosis is known as *C. neoformans*, and felines become infected from the inhalation of its spores (Santos, 2010), found in the environment associated with pigeon droppings, decaying plant material and tree stumps, and in this way, they reach the upper respiratory tract and can progress to the lungs (Nelson & Couto, 2015).

#### **2 METHODOLOGY**

The disease in cats is commonly known as "clown nose", due to the appearance of lesions with formation of firm masses in the subcutaneous tissue (Pereira & Coutinho, 2003). The diagnosis involves anamnesis, clinical history, physical examination and complementary tests. The aim of this paper is to report the occurrence of a case of cryptococcosis in a feline, as well as to describe the diagnosis and prescribed treatment.



### 3 RESULTS AND DISCUSSION

A 10-month-old male, neutered, FIV and FELV-negative feline was seen at a veterinary clinic, presenting apathy, dehydration, vomiting, nasal lesions and dyspnea. In the anamnesis, the guardian reported that the animal was not eating, so she sought the first care in another clinic, where the use of Prednisolone (20mg/kg VO for three days) was prescribed, obtaining no improvement but a worsening of clinical signs.

Based on the history of street access and clinical signs presented, cryptococcosis was suspected. For a more accurate diagnosis, cytology examination was performed by imprint of the nasal region, followed by staining by the panoptic method. In the evaluation of the slide, it was observed the presence of rounded yeast cells, surrounded by a clear halo of variable thickness, equivalent to a capsule, compatible with *Cryptococcus* yeasts. Due to signs of dehydration and dyspnea, hospitalization of the animal was recommended, and fluid therapy was used with 0.9% saline solution, vitamin B complex to replace electrolyte losses, Maxicam (0.3ml/kg/SID IV) Methadone (0.03ml/kg/BID IV), Agemoxi (0.4ml/kg/BID SC) and 1 tablet of Itraconazole (50mg/kg/BID VO).

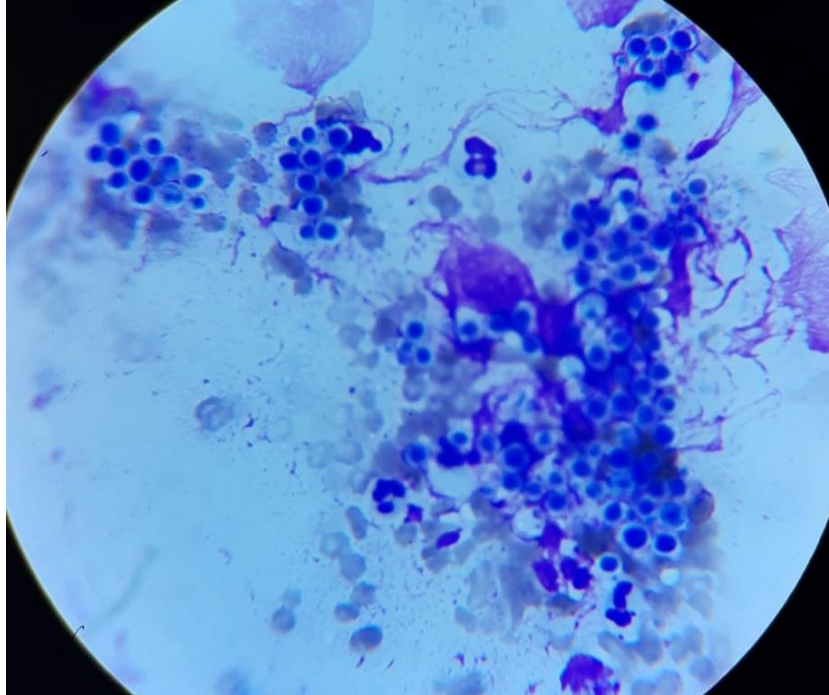
After seven days of hospitalization, there was a significant improvement of the lesion, and the patient was discharged to continue treatment at home, which is currently following with Itraconazole and Omeprazole, until the complete disappearance of the lesion.

This is a disease that can affect different species of animals, with cats being more susceptible and the symptomatology described in this report is compatible with literature citations. The tissues affected by the infection do not favor the formation of aerosols of this fungus, so transmission between diseased mammals is unlikely.

The main source of infection is through the feces of birds, mainly pigeons (Nelson & Couto, 2015), so the control of the urban pigeon population and the monitoring of risk areas are fundamental to control the occurrence of cryptococcosis.



Figure 2 - *Cryptococcus* yeasts



Source: author's own (2021)

#### **4 CONCLUSION/FINAL CONSIDERATIONS**

Cryptococcosis is a common pathology in the small animal clinic and the clinical evaluation, anamnesis, and cytological examination allow an appropriate treatment. Knowledge about the epidemiology of *C. neoformans* is important, as it may indicate the possible source of infection for felines and humans, as it is an important zoonosis.



## REFERENCES

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