Partial nasal obstruction due to Cryptococcosis

Case presentation: An eight year old indoor neutered domestic short haired cat was referred for dental evaluation after a three month history of breathing difficulty and anorexia for four days. The patient was current on routine vaccinations as well as feline leukemia, and feline infectious peritonitis.

Physical exam revealed a hyperthermic well hydrated, bright and alert cat in good body condition. There were marked nasal inspiratory and expiratory sounds with open mouth breathing. A 4 mm x 5 mm ulcerated mass was noted on the rostral ventral floor of the right nostril. The dorsal surface of the right nostril was swollen. Clinical and fundascopic examination of the eyes appeared normal. The heart and lungs ausculted normally. The abdomen palpated normally. Oral examination revealed generalized stage 4 periodontal disease with a marked calculus and plaque on the buccal surfaces of the maxillary fourth premolars as well as class 3 odontoclastic resorptive lesions of the mandibular third premolars.

Cell blood count, chemical profile, feline leukemia as well as feline immunodeficiency virus testing were within normal ranges. Chest and abdomen films were also within normal limits. Preanesthetic and induction medication were given for general anesthesia. Radiographs of the nose revealed loss of right sided conchae detail. Intraoral radiographs revealed multiple areas of external root resorption without ankylosis.

Intraoperative fine needle aspiration cytology of the nasal mass revealed a moderately cellular sample consisting of neutrophils and numerous encapsulated fungal yeast forms with some budding, morphologically compatible with cryptococcosis sp. A biopsy specimen was taken from the rostral nasal mass. Histopathology revealed a granulomatous inflammation with numerous interlesional yeasts consistent with Cryptococcus neoformans. Cryptococcosis serology was positive at 1:217. Surgery was performed to extract the teeth affected by odontoclastic lesions. The patient was placed on itraconazole daily.

Outcome

Two weeks postoperatively the patient was reexamined. According to the owner the respiratory sounds had significantly decreased. The owners were informed about the zoonotic issues related to the diagnosis. The owners’ home was affected by mold. Due to distance restraints the referring veterinarian managed the follow up.

**Implication/ application**
This case was most interesting because the final diagnosis came from a cytological evaluation of a nasal mass in a patient referred for dental disease. The diagnosis had further implications relating to finding the source of infection.