

# Nasal Mass in a Golden Retriever

## Contributors

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## Signalment

11-year-old male neutered Golden Retriever

## Specimens

- Histopathology of an incisional biopsy of a nasal mass
- Impression smear cytology of a nasal mass
- Histopathology of an excisional biopsy of a nasal mass

## History

An 11-year-old male neutered Golden Retriever presented for the investigation of a 4-month history of serous to mucoid nasal discharge that had been previously treated with antibiotics. The dog was up-to-date with the usual vaccinations used in Australia, and up-to-date with his worming prevention.

## **Clinical findings**

Clinical examination revealed a lack of airflow through the left nostril and inspiratory dyspnoea. The dog was otherwise well in himself and did not exhibit any other signs of illness.

## **Diagnostic procedures**

Complete blood count, a peripheral blood smear and biochemistry showed no abnormalities.

An Immuno-Mycologies Cryptococcal Antigen Lateral Flow Assay was negative for *Cryptococcus* spp.

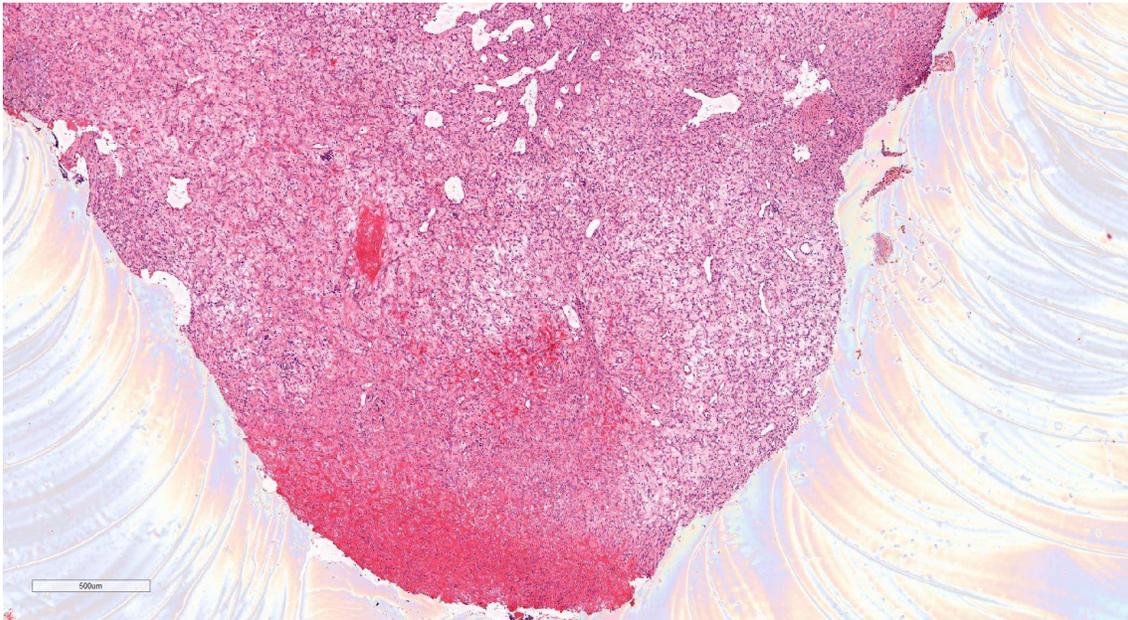
Computed tomography of the skull and nasal region was performed and revealed a soft tissue mass occupying the entire left nasal cavity, with some crossing into the right cavity as well as crossing the cribriform plate into the cranial vault. These findings were consistent with neoplasia within the nasal cavity. Blind biopsies of the left nasal cavity were performed and submitted for histopathology (Figure 1).

Following biopsy interpretation, a diagnosis was reached, and chemotherapy commenced.

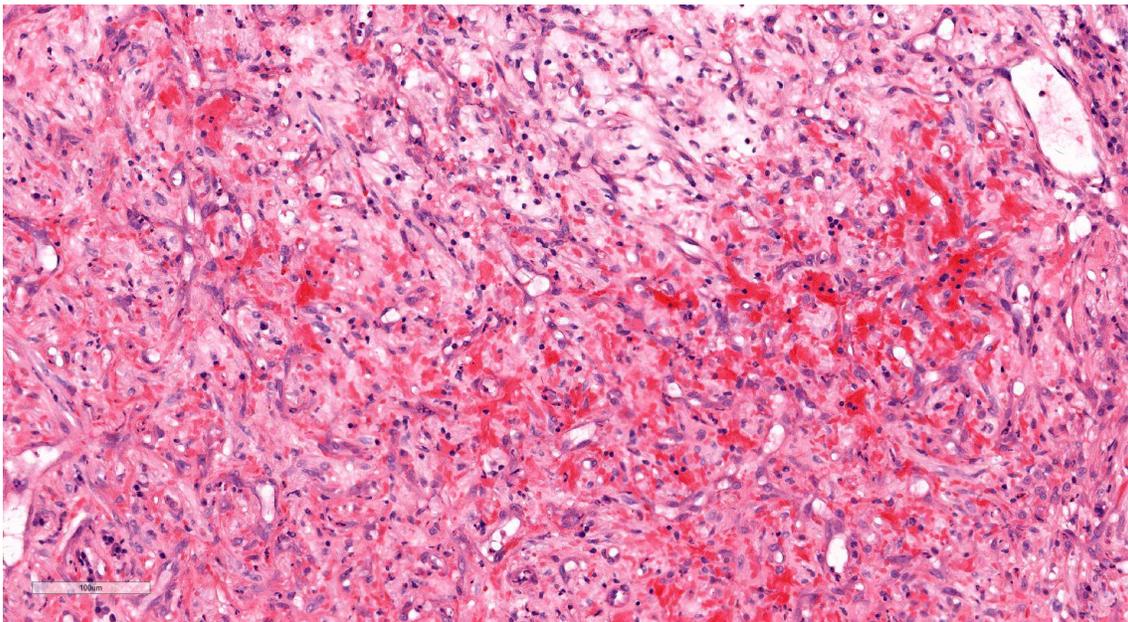
Unfortunately, due to deterioration of his clinical condition, the dog was euthanised one year later and submitted for postmortem examination.

On postmortem examination, a dark purple-red mass was found to be occupying the left nasal cavity; compressing the nasal septum; causing extensive bony lysis of the left maxilla; and extending into the right nasal cavity, nasopharyngeal meatus, and the sphenoid and left frontal sinuses (Figure 2). Impression smears and histopathology of the mass was performed (Figures 3 to 5).

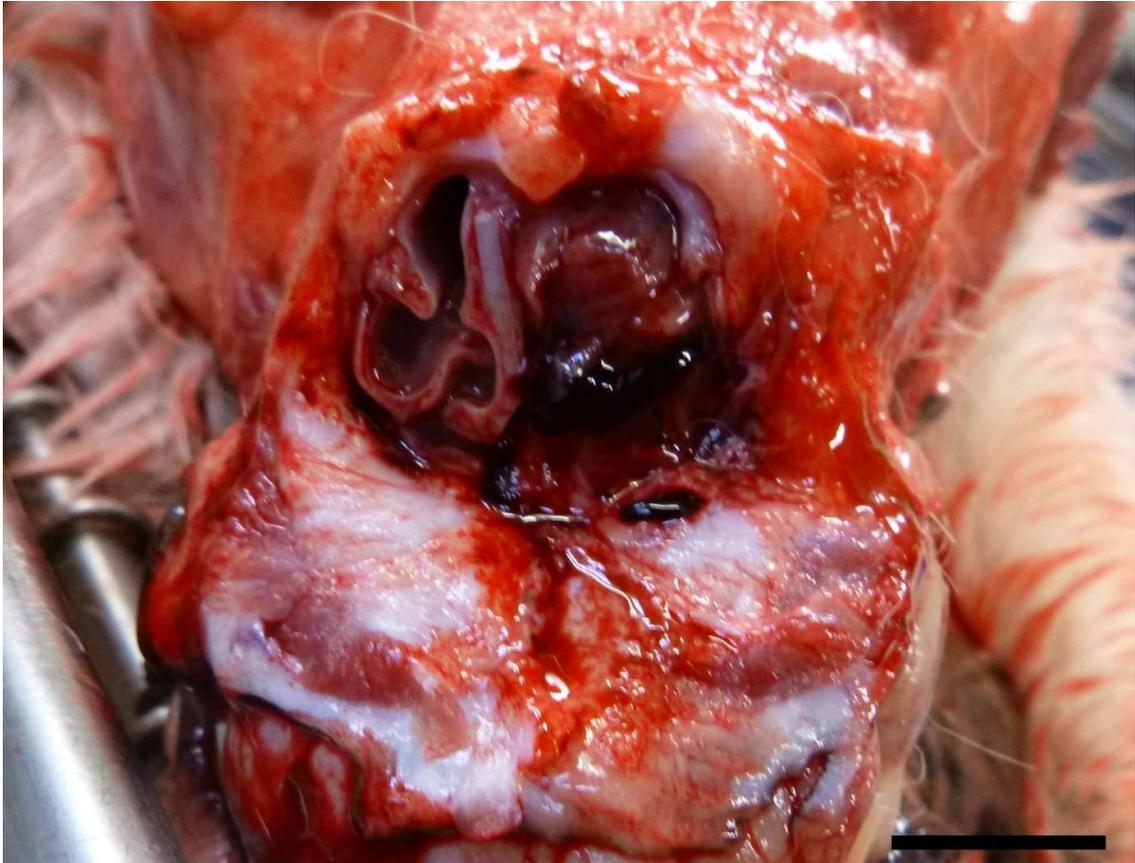
A



B

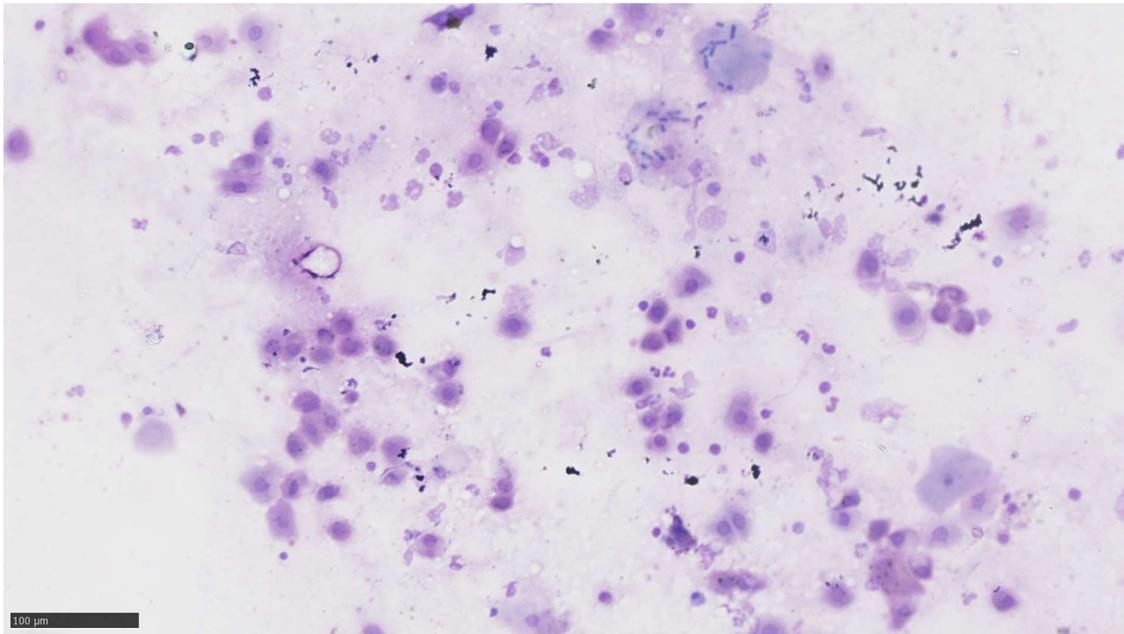


**Figure 1.** Histopathology of an incisional biopsy of a nasal mass from an 11-year-old male neutered Golden Retriever. Haematoxylin and eosin stain. x4 magnification (A) and x20 magnification (B).

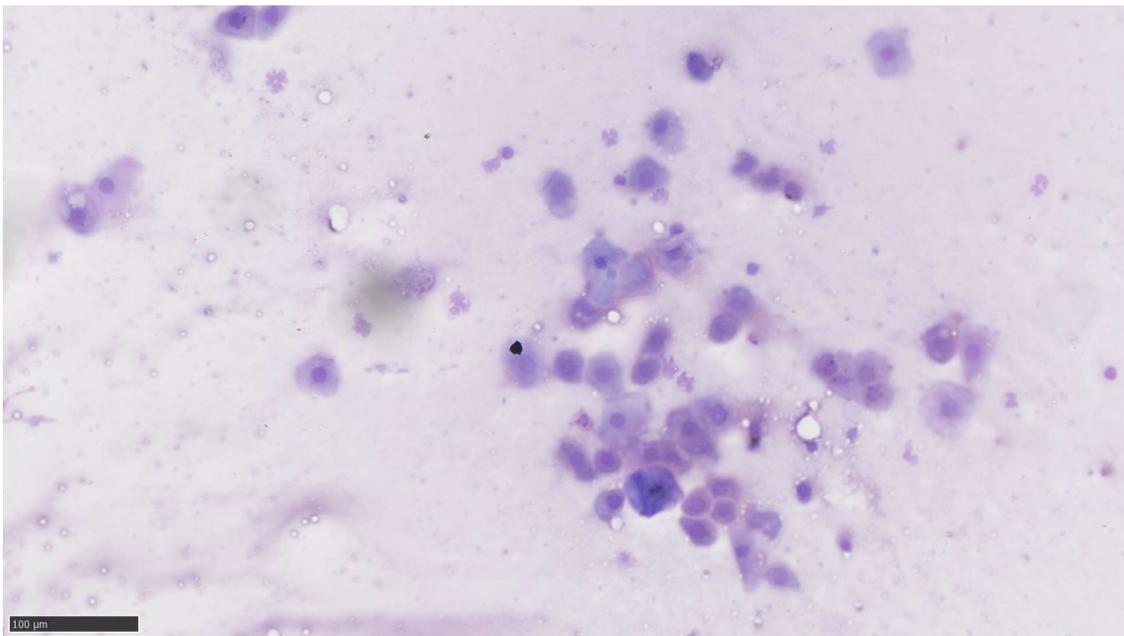


**Figure 2.** Nasal mass in an 11-year-old male neutered Golden Retriever in situ (A), and ex vivo (B). Bar = 1 cm.

A

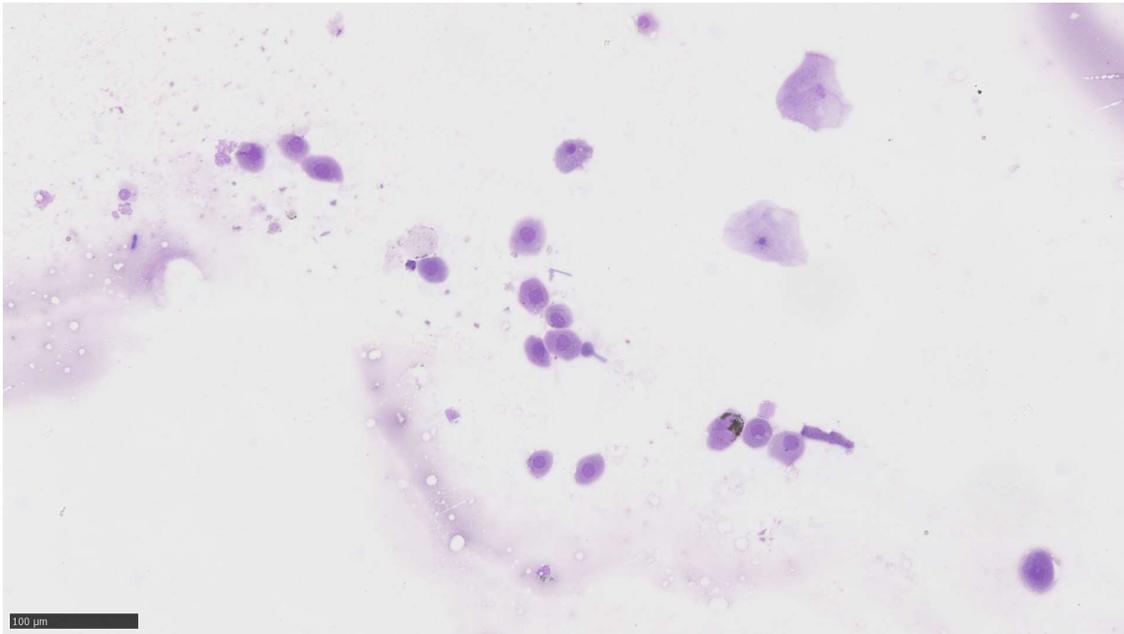


B

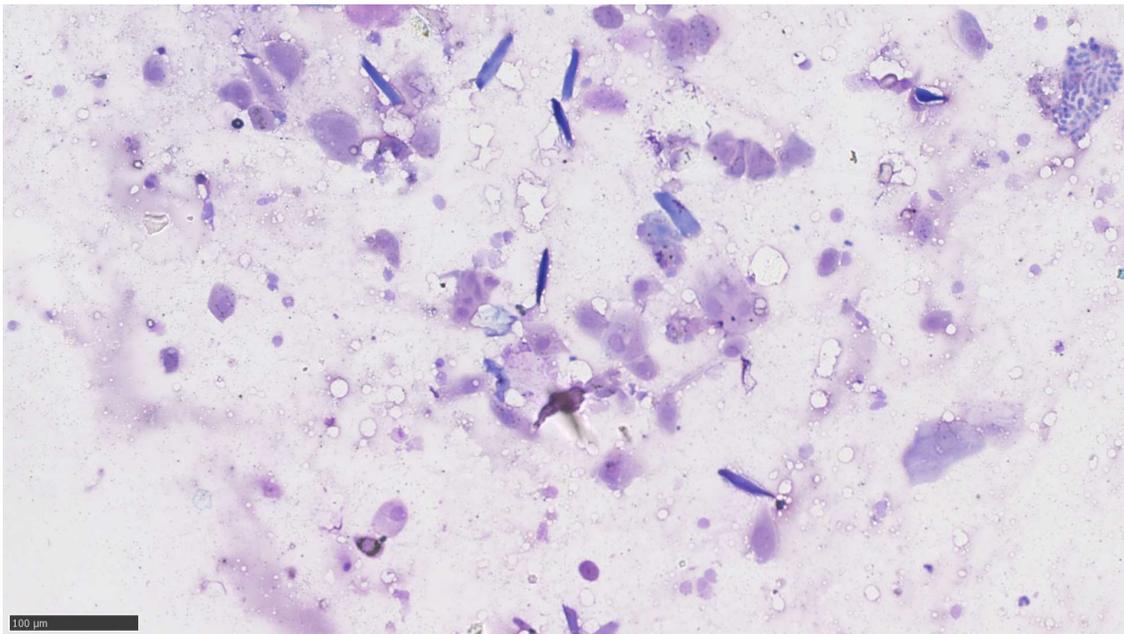


**Figure 3.** Impression smear cytology of a nasal mass from an 11-year-old male neutered Golden Retriever. Diff-Quik stain. X20 magnification (A, B).

A

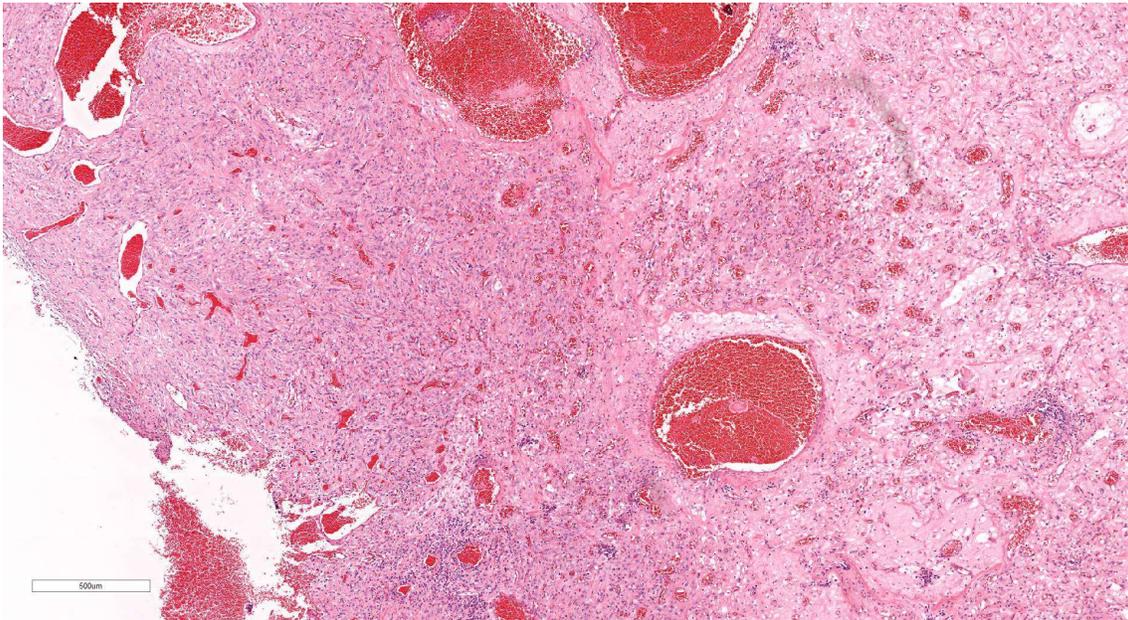


B

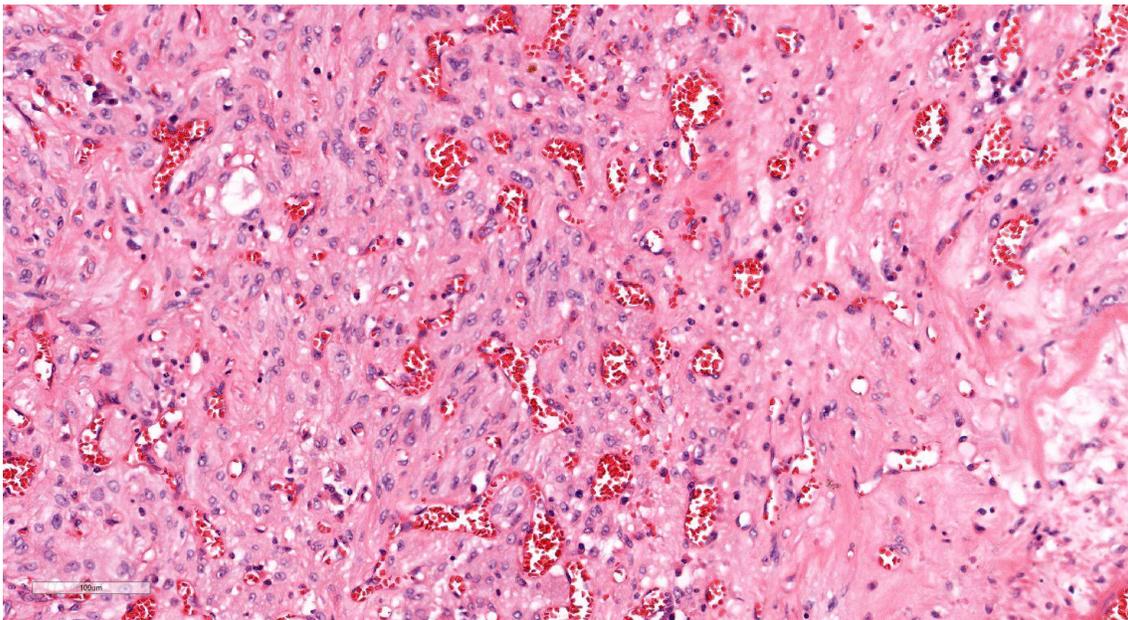


**Figure 4.** Impression smear cytology of a nasal mass from an 11-year-old male neutered Golden Retriever. Diff-Quik stain. x20 magnification (A, B).

A



B



**Figure 5.** Histopathology of an excisional biopsy of a nasal mass from an 11-year-old male neutered Golden Retriever. Haematoxylin and eosin stain. x4 magnification (A) and x20 magnification (B).

## Questions

1. What is your description of the cytologic findings?
2. What is your description of the histologic findings?
3. What is your interpretation of the cytology and histologic findings?