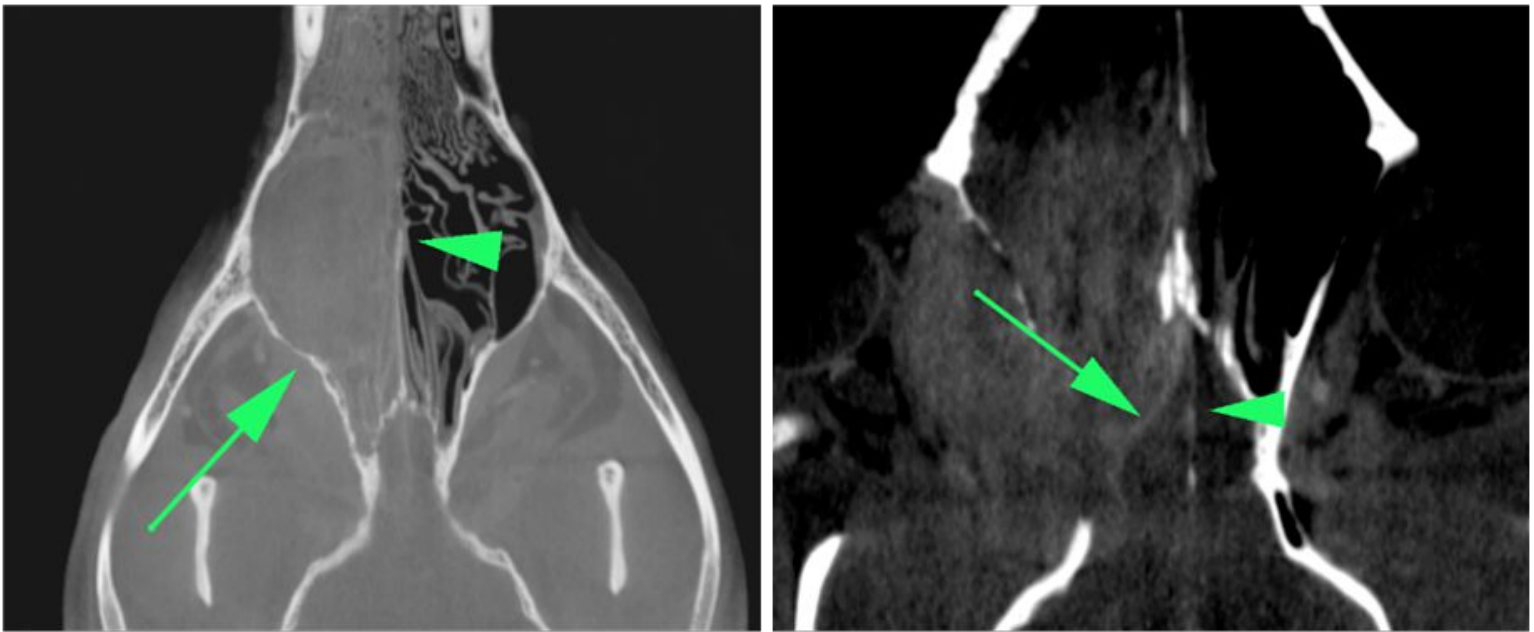


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VIMAGO
SMALL ANIMAL CASE STUDY REVIEW

By Dr. Robert O'Brien, DVM, DACVR

Nasal carcinoma with local brain invasion



PATIENT

10-year-old male neutered welsh terrier dog that presented with a 2-month duration history of right sided mucopurulent nasal discharge that recently became bloody.

IMAGE PROTOCOL

A survey and post-i.v. contrast CT was performed of the skull. The contrast dose was 1ml ml/lb BW of Iohexol (300mg/ml iodine) contrast media given as a bolus immediately prior to image initiation.

FINDINGS

The entire right nasal cavity and frontal sinus was filled with uniform soft tissue opacity, mildly enhancing material. There is indistinct turbinate destruction and deviation of the boney septum to the left. There was lysis on the left side of the nasal vault; maxilla, nasal and adjacent caudal bones. Lysis of the cribriform plate was seen with the mass invading into the brain causing deviation of the contrast enhanced meninges and mild leftward deviation of the contrast-enhanced falx cerebri.

Nasal carcinoma with local brain invasion

IMAGING DIAGNOSIS

Right-sided aggressive mass lesion Brain involvement.

FINAL DIAGNOSIS

Nasal carcinoma with local brain invasion.

DISCUSSION POINT

Nasal imaging was one of the very first using of veterinary CT technology. No imaging system in the world provides the combination of superior spatial resolution (< 200 uM) and very good injected contrast agent enhancement. This case demonstrates the advantage of CT over conventional skull images by providing both nasal cavity and nasal vault information. Brain involvement is a very important negative prognostic indicator with nasal cancer. Unequivocal brain involvement is seen in this case with excellent meningeal and faux contrast enhancement. ***The Vimago™ HD CT system capabilities and spatial resolution advantages over conventional CT are demonstrated clearly during nasal imaging.***