

Courtesy

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Symptoms

- Inflammation conjunctivae right eye
- Atrophy of the temporal muscles
- Seizure

Patient history

- Complete Blood Count: inflammation
- Computed Radiography: no specific abnormalities

System information

- Images acquired on a Philips Mx8000 Quad multislice CT scanner

Findings

- Large tumor in right retrobulbar area with osteolysis and expansion to right nasal cavity and brain

Conclusion

- CT was used to clearly visualize tumor growth inside the skull

CT imaging retrobulbar process dog

Philips veterinary imaging solutions



History

The dog is a 5-year-old Entlebucher Sennen presented with inflamed conjunctivae of the right eye, atrophy of the temporal muscles and history of seizures. The first symptoms began three weeks prior to the CT scan. Symptoms worsened during this time frame. Clinical examination and skull X-ray were inconclusive. Following a massive seizure, a CT scan (with contrast) was requested for a better evaluation of the symptoms.



A.J. Hof, DVM, co-owner and veterinarian

Diagnosis

Figure 1 shows pre-contrast (A) and post-contrast (B) transverse images. The post-contrast image clearly visualizes invasion of the tumor into the brain. In the brain itself there is a shift from the median line to left.

Figure 2 shows post-contrast dorsal MPR (Multiplanar Reformatting). This image shows the growth of the tumor in the nasal cavity, retrobulbar area and the brain. The osteolysis of bone structure on the right side is clearly visible. The right eye is pushed forward because of the retrobulbar process. In the brain the median line is shifted to the left and the ventricles are asymmetrical.

The final diagnosis was a pronounced tumor in the retrobulbar area and nasal cavity with osteolysis and expansion to the brain.

Clinical significance

CT is highly useful in imaging of the intracranial, nasal and retrobulbar areas. In this case, the unexpected expansion of the tumor to the brain and osteolysis of the bone was clearly visualized, thus providing substantial information to the clinician.

Scan parameters:

- 120 KV 245 mAs
- 2.0 mm Slice Thickness
- 1.0 mm Slice Increment
- 0.88 Pitch
- 43 sec Scan Time
- 200 mm Scan length

Figure 1

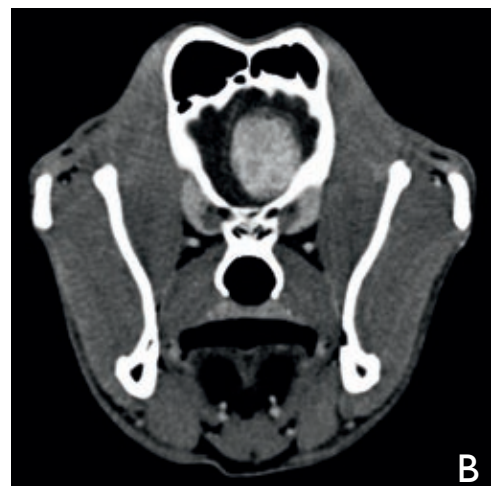
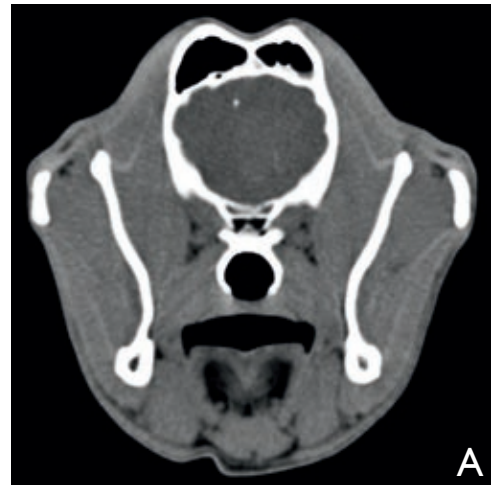


Figure 2



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