

Canine: Idiopathic Facial Nerve Paralysis

Irish Setter (MN)
10 years old



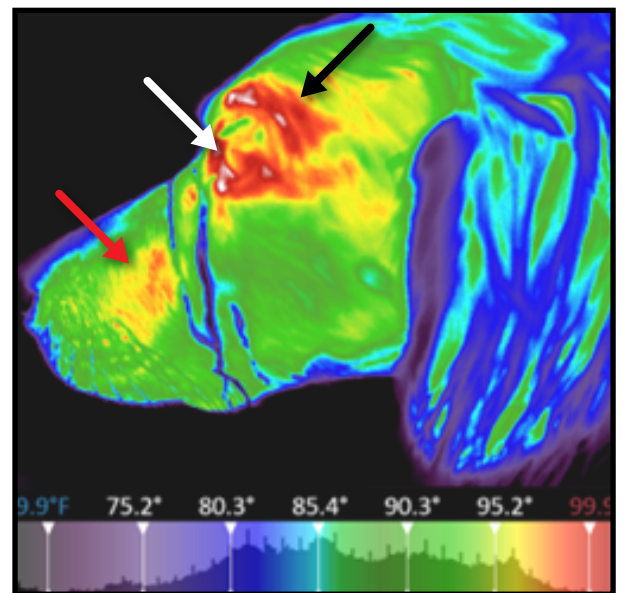
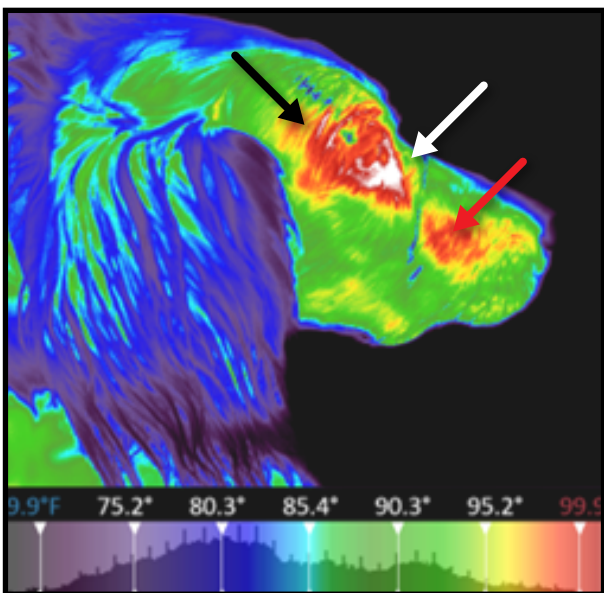
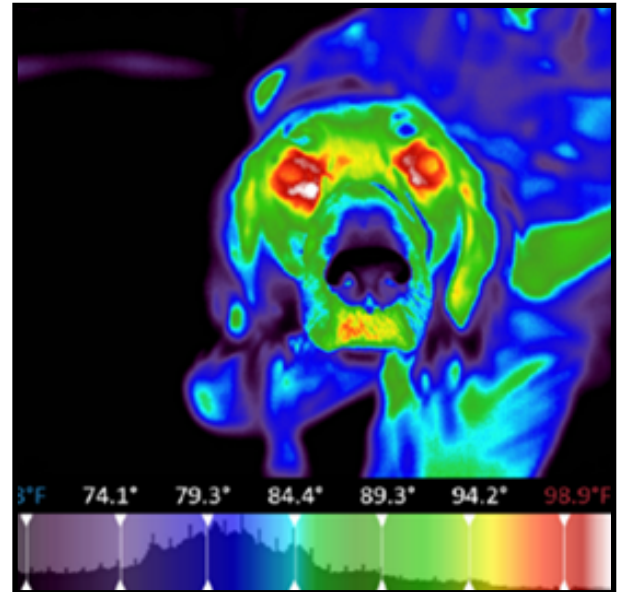
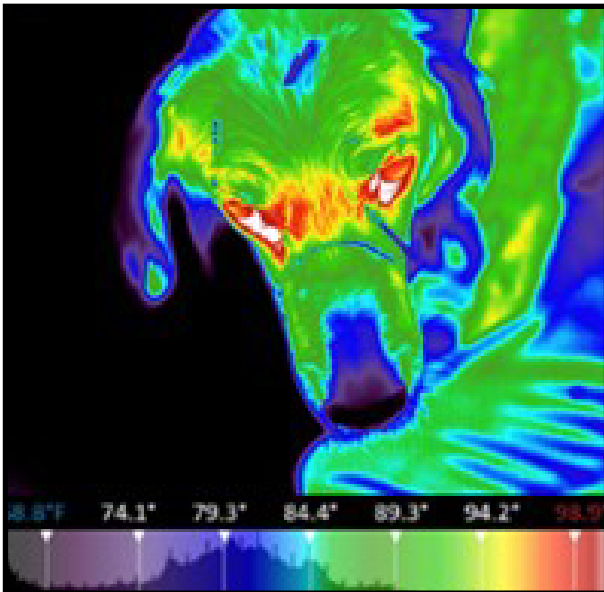
Presentation

Pet Owner

The patient has trouble eating; food falling from the mouth. The client reports dryness and discharge from the right eye that began suddenly about a week ago.



WellVu Thermal Imaging





Intervention Based on Findings

Dorsal and Anterior to Posterior Views:

- Areas of asymmetrical hyperthermia and hypothermia were present on the affected side of the nose and in the frontal and periorbital regions. This abnormal hypothermia and hyperthermia pattern results from the complex anatomy of the region innervated by the facial nerve.

Lateral Views:

- Generally, irritation to the sympathetic nerve supply to an anatomical area result in asymmetrical hypothermia. In the case of facial nerve paralysis, the tissues covering the nose and muzzle become flaccid and do not move as the patient opens the mouth or pants, and facial folds flatten resulting in an increase in the thermal gradients.
- The red arrows point to areas of asymmetrical hyperthermia. The temperature of these areas increased because of the flattening of the right facial folds and persistent contact of these areas with underlying structures.
- The white arrows identify areas of asymmetrical periorbital thermal gradients. The higher temperatures on the right side suggest inflammation resulting from the reduced tear production accompanying this disorder.
- The black arrows point to thermal asymmetry resulting from the loss of right-side facial innervation in the area above the right eye and over the right frontal bone resulting in a significantly lower thermal gradient.

Physical Exam

- There were no changes in either cornea. There was an incomplete blink response, a laxity and lack of tone in the lower lid, reduced production of tears, and lagophthalmos in the right eye. A lack of motor function on the right side of the face.



Take-Aways

1. Visualization of the complex pattern of the changes in circulation accompanying this condition.
2. Supporting evidence that no other pathological problems are present that are altering the circulatory pattern.
3. Client education about the large anatomical area affected by facial nerve paralysis and understanding the reasoning behind the treatment recommendations and the difficulty involved in a final resolution.