

Idiopathic Facial Nerve Paralysis

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BASIC INFORMATION

Description

The classic features of idiopathic facial nerve paralysis in dogs and cats include an inability to blink, drooping of the lips, and occasionally decreased tear production on the affected side.

The American cocker spaniel, Pembroke Welsh corgi, English setter, and domestic longhaired cats are predisposed to this disease. Any dog or cat can be affected, however. Twelve pairs of nerves (one on each side of the head) originate at the base of the brain and are responsible for certain neurologic functions of the head and face. These paired nerves are called the *cranial nerves*, and they are numbered I through XII. The seventh cranial nerve (VII) is the facial nerve, and it controls the muscles involved in facial expression, blinking, and tear production.

Causes

The term *idiopathic* indicates that the cause of the condition is unknown. Although some cases of facial nerve paralysis have an identifiable origin (such as diseases or surgery of the ear, tumors, metabolic disorders), in this disease the cause is not defined. All common causes of facial nerve paralysis must be ruled out in order to call it *idiopathic*.

Clinical Signs

Typically, a sudden weakness or paralysis occurs on one side of the face. If nerves on both sides of the head are affected, weakness is seen on both sides of the face. This weakness causes the ear and lips to droop. Animals may drop food or drool from the affected side of their mouth. Sensation (feeling) in the face is normal.

Because the facial nerve causes the eyelids to blink and controls the tear glands, affected animals may be unable to blink and may develop “dry eye” from a lack of tears on the affected side of the face. Dry eye may be associated with conjunctivitis

(redness), yellow-green discharge, and ulceration of the cornea. Vision remains normal.

Diagnostic Tests

Diagnosis is based on examination findings and the exclusion of other causes of facial nerve paralysis. Careful inspection of the ears is performed in affected animals. X-rays and advanced imaging of the ear canal and brain by computed tomography (CT scan) or magnetic resonance imaging (MRI) may be recommended in some animals. These tests are normal in animals with idiopathic facial paralysis. Dogs may also be tested for low thyroid function (hypothyroidism), which has been associated with facial nerve paralysis. Evaluation of tear production and other testing of the eyes may also be performed.

TREATMENT AND FOLLOW-UP

Treatment Options

There is no specific treatment for idiopathic facial nerve paralysis. Artificial tears may be applied to the eye on the affected side to prevent corneal ulcerations. If dry eye is present, additional medications may be recommended.

Follow-up Care

Initially, follow-up examinations may be done frequently to monitor for development of corneal ulcers. Notify your veterinarian if the eye on the affected side becomes red or squinty, if it has increased discharge, or if the cornea becomes cloudy, because these signs could indicate the presence of a corneal ulcer.

Prognosis

Prognosis for return of function is very poor in most cases. Most affected animals do not regain function of the facial nerve. If function returns, it may take weeks for an improvement to be detected. Sometimes only partial recovery occurs. A full recovery does occasionally happen.