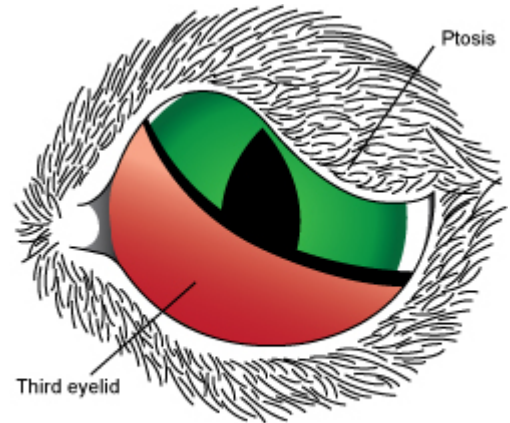


Horner's Syndrome in Cats

What is Horner's Syndrome?

Horner's Syndrome is a common neurological disorder of the eye and facial muscles, caused by dysfunction of the sympathetic nervous system. The condition usually occurs suddenly and without warning. The most common clinical signs of Horner's Syndrome are:

- Drooping of the eyelid on the affected side (*ptosis*)
- The pupil of the affected eye will be constricted (*miosis*), or smaller than usual
- The affected eye often appears sunken (*enophthalmos*)
- The third eyelid of the affected eye may appear red and raised or protruded (conjunctival hyperemia)



Used Under License
Copyright© Lifelearn Inc.

What is the sympathetic nervous system?

The sympathetic nervous system is one part of the autonomic nervous system. The autonomic nervous system controls automatic or involuntary functions in the body. The two separate and complementary parts of the autonomic nervous system are the sympathetic nervous system, which controls 'fight or flight' functions of the body and the parasympathetic nervous system, which regulates routine functions during a relaxed state such as digestion. The autonomic nervous system helps control normal functions of the eyes and facial muscles, including blinking, muscle tone, the amount of dilation or constriction of the pupils, and so on. When the sympathetic nervous system is activated or stimulated, the pupils dilate, the muscles tense, the heart rate increases, and the body gets prepared for 'action'. The sympathetic nerves that control the eye follow a long path and they can become damaged anywhere along the route. They leave the spinal cord just inside the chest and travel up the neck to the head, where they connect to nerves just below the ear. From there, they continue their journey to the eye.

What causes Horner's Syndrome?

If the sympathetic nervous system that supplies the eyes is damaged or is malfunctioning, the parasympathetic system 'takes over', and the symptoms of Horner's Syndrome appear. The damage or malfunction can occur in the neck area, the ear area or the eye area. Damage may occur because of blunt force trauma such as that caused by an automobile accident or because of a bite wound from another animal. Other problems that can cause damage or inflammation of the nerves in this area include diseases within the eye or in the retrobulbar (behind the eye) area, problems in the middle ear (otitis media), or tumors in the chest, neck or brain.

"With many cats that develop Horner's Syndrome there is a recent history of trauma..."

In dogs, Horner's Syndrome is 'idiopathic', which means it has an unknown cause, in about half the cases. In cats, however, a cause is virtually always found, and idiopathic Horner's Syndrome is very rare. With many cats that develop Horner's Syndrome there is a recent history of trauma, particularly being hit by a car.

Depending on your cat's recent history and other physical findings on examination, your veterinarian may recommend a series of diagnostic tests to determine if there is an underlying cause. Initial tests will usually include a neurologic evaluation, an otoscopic examination (examination of the ears) and x-rays of the chest and neck area.

Are there any other problems that could look like Horner's Syndrome?

In some cases, the only obvious symptom is elevation of the third eyelid. If this is the case with your cat, your veterinarian will rule out the possibility of problems such as facial paralysis (common with severe ear infections), facial muscle paralysis, severe dehydration, or Haw's paralysis. With Haw's paralysis, animals, particularly cats, will elevate their third eyelids in response to illness, particularly intestinal irritation; the third eyelids may remain elevated for up to 4–6 weeks, but will eventually go back to normal. There is a rare disorder in cats called Feline Dysautonomia (Key-Gaskell Syndrome) that has symptoms of constricted pupils, elevated third eyelids, urinary retention, constipation, and other problems related to severe disruption of the sympathetic nervous system.

What is the treatment?

Most cases of Horner's Syndrome will resolve spontaneously or on their own over time. Since the cat may have an inability to blink normally, your veterinarian may recommend symptomatic treatment in the form of eye medication to minimize the development of corneal ulcers from what is called 'exposure keratitis'. Other symptomatic treatment that might be recommended is the use of phenylephrine drops in the affected eye to dilate the pupil. If an underlying disease is identified, it is important to treat that disease.



What is the prognosis and recovery rate?

"The prognosis depends on the underlying cause..."

The prognosis depends on the underlying cause. Patients with chest trauma tend to have a quicker recovery rate (days to weeks) than patients with other lesions. If the underlying problem is Feline Dysautonomia, the prognosis is poor.

This client information sheet is based on material written by: Cheryl Yuill, DVM, MSc, CVH

© Copyright 2010 Lifelearn Inc. Used and/or modified with permission under license.