HORNER’S SYNDROME

What is Horner’s syndrome?
Horner’s syndrome is a clinical condition which is caused by damage to the sympathetic nervous system. It may also be called Bernard-Horner’s syndrome or oculosympathetic palsy. This syndrome is considered a neuro-ophtalmic syndrome due to the involvement of both the nerves and the eye. Evaluation by both a neurologist and an ophthalmologist will be beneficial in determining cause.

What causes Horner’s syndrome?
A number of different causes have been identified for Horner’s syndrome because the damage may occur anywhere along the nerve’s route from the brain to the eye.
Common causes of Horner’s include:
- Acquired: developing as a result of another condition.
  - Middle ear infection,
  - Aneurysm,
  - Tumour (brain, spinal cord, thoracic),
  - Neuropathy (viral, immune-mediated).
- Iatrogenic: caused by some other event.
  - Trauma,
  - Traumatic venipuncture,
  - Nerve blocks
- Congenital: a condition which is present at birth.
- Idiopathic: an unknown cause.

What will I see if my pet has Horner’s syndrome?
Horner’s syndrome can occur in dogs, cats, horses and other domestic species, including humans.
Clinical signs of Horner’s include:
- Miosis (constriction) of the pupil on the affected side of the face (ipsilateral),
- Anisocoria (different size pupils),
- Ptosis (drooping eyelid),
- Narrowed palpebral fissure,
- Enophthalmos (eye sunken into orbit),
- Protrusion of the third eyelid,
- In horses: sweating and hyperthermia may be present on the affected side of the face and neck.
Horner’s syndrome commonly occurs in middle-aged and senior dogs. Golden Retrievers and Cocker Spaniels are most often affected.
Testing for Horner’s may include: history and clinical signs, complete physical examination (including neurological, ophthomological, and aural), thoracic radiographs, MRI, and CT scan.
A diagnosis of Horner’s syndrome can be confirmed using a 10% phenylephrine eye drop in the affected eye. If the animal has Horner’s the symptoms will disappear within 10-15 minutes of application.
Is Horner’s syndrome treatable?
If the nerve damage is located in the sympathetic ganglion (just behind the eye) or beyond, it is called post-ganglionic. Most idiopathic cases of Horner’s are post-ganglionic and have a favourable prognosis. In idiopathic Horner’s, spontaneous recovery may occur over time. If the nerve damage occurs between the brainstem and the sympathetic ganglion, it is called pre-ganglionic. This type of damage has a less than favourable prognosis. If the cause of the Horner’s syndrome can be removed, the symptoms may resolve. However, even if the cause is removed, permanent nerve damage may have already occurred.