Horner’s syndrome
Condensed Version

**Presentation:** “My Third Sunken Toe”

1. **Miosis** (Affected pupil will not dilate fully in dark)
2. **Prolapse of nictitating membrane** (3rd eyelid)
3. **Enophthalmos** (sunken eye)
4. **Ptosis**

   - **Horses** – *Ipsilateral sweating*, base of ear, neck, face, skin hyperthermia
   - **Cattle** – *Ipsilateral LACK of sweat* on face and muzzle

**Other signs may help to localize the site of the lesion**
- Paresis thoracic limb (brachial plexus avulsion, nerve root tumor)
- Head tilt, nystagmus, facial nerve paralysis (otitis media/interna – small animals only)
- Respiratory distress (thoracic mass)
- Tetraparesis, altered mentation (central lesion)

**Test of choice:** To localize and diagnose lesions
- Central lesion – MRI of brain, C1-T3; myelography C1-T3
- Preganglionic lesion – EMG, MRI of brachial plexus
- Postganglionic lesion – Thoracic radiographs, CT of skull

**Pearls:**
- Most common causes
  - Idiopathic (approx 50% of canine cases)
  - Otitis media/interna
  - Brachial plexus avulsion

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**Zuku Review FlashNotes™**

**Classic Question(s)**

**Name four signs of Horner’s syndrome.**

**What is a disease that would cause Horner’s syndrome from a central lesion?**
Preganglionic lesion? Postganglionic lesion?
What tests are required to rule out each of the diseases?

**How can an inadvertent perivascular jugular injection cause Horner’s?**

A dog hit by a car is presented non-weight bearing on the left forelimb with ipsilateral left Horner’s syndrome. The dog has deep pain sensation in the affected left fore.
What is the prognosis for eventual return to function?

**After 4 weeks, the dog has not improved neurologically. What should you tell the owner?**