“Idiopathic Laryngeal Paralysis”
What we have known for years...

- Older dogs, mostly Labradors, also Newfoundlands, other med-large
- Slowly developing loud breathing (stridor), cannot exercise as much
- Episodes of collapse, turn blue, often present as emergency (35%)
- Some unsteadiness and weakness reported (30%)
- Some gagging reported (30%)
- Throat-clearing
What we have also known for years...

- Surgery helps breathing significantly and immediately
Dogs typically go home a day or two after surgery.

But.... post-operatively...

**aspiration pneumonia 10 - 20%**, sometimes a year later...

...also continued gagging/coughing...

Why? Surgical procedure!
Clinical study...

- Study followed affected dogs over 12 months
- Compared them to age- and breed-matched control group
- Tested swallowing function
- Repeated history and clinical signs
- Repeated neurologic examinations
- Repeated chest radiographs
Mean esophageal scores in each phase were significantly higher in the Cases than in the Controls.
Aspiration pneumonia

- 5/27 (18%) cases experienced aspiration pneumonia.
- The cases that experienced aspiration pneumonia had significantly higher esophageal scores (3.3 vs 1.5) than the cases that did not experience aspiration pneumonia.

All cases of aspiration pneumonia were detected early by and responded well.
Results: Neurologic signs

Neurologic status at enrollment:
10/32 (31%) cases; 0/34 (0%) controls

• Muscle atrophy most prominent around epaxial, pelvic limb (SM, ST) and temporal musculature.
• 1 case had vestibular signs
• 2 cases had seized and died.

71%.... slight ataxia, slight weakness, CP deficits .......................... 17%
29%.... obvious ataxia, moderate weakness, muscle atrophy........ 37%
marked pelvic limb paresis....... 42%
Non-ambulatory......... 4%
Conclusions

- Late onset disease (average age of 11 yrs)
- Early signs of laryngeal and esophageal dysfunction
  - = breathing and swallowing issues
- Progresses to marked muscle wasting, abnormal reflexes and weakness
- Eventually unable to walk
• Surgery significantly helps breathing (do esophagram first)
• Neurologic degeneration is relentless over months to years
• Euthanasia typically due to neurologic issues, or repeat aspiration pneumonia
• Distressing for owners, much loved long term companion
• 70% Labs, then Newfoundlands
  • Common heritage
  • 5.5% of all labs admitted
  • 4.5% of all Newfies admitted

What did we learn?
We don’t know enough about this disease!
Geriatric Onset Laryngeal Paralysis Polyneuropathy

GOLPP
GOLPP Study Group

Geriatric Onset Laryngeal Paralysis Polyneuropathy

- Surgeons
- Neurologists
- Radiologists
- Geneticists
- Pathologists
- Anesthesiologists
- Internists
- Technicians
- Owners

Joey & Mom
Snickers & best friend
What are the questions?

- What is the true incidence of the condition?
- Is it *really* a polyneuropathy in *all* dogs?
  - Where does it originate from – brain? spinal cord? peripheral nerves?
- Is progression variable?
- Can we slow down progression?
- How can we help swallowing problems and maintain quality of life?
- Can we identify a cause? (Newfies and Labs…founder effect)
- Can we prevent it?
Goals of the GOLPP Study Group:

- Fully characterize the condition clinically
  - Follow GOLPP dogs every 3 months
  - Electrodiagnostic testing (EMG/NCS)
  - Swallowing dysfunction progression
  - Website

- Identify incidence in predisposed breeds
- Enable earlier diagnosis
- Provide more accurate prognosis
- Seek better ways of managing dysfunctions / slowing progression
- Identify causative mutation, develop screening test (Labradors)
Welcome GOLPP dogs!

Welcome to the GOLPP Study Group online community. This site is especially for owners of dogs diagnosed with Geriatric Onset Laryngeal Paralysis Polyneuropathy who are entered into the GOLPP Study. However, there are areas of this site that will contain information for any owners of GOLPP dogs.

The Study Group is here to support you as Participants of the Study because we know that each dog is a very special member of the family. This is also a platform where Study Participants can support each other and discuss issues they may face with their canine companions.

About the GOLPP Study Group

Living with GOLPP

Laryngeal Surgery

Resources

For veterinarians and veterinary technicians

Our GOLPP Gang

The GOLPP Gab (the forum)

The GOLPP Study tests

GOLPP Birthdays!

GOLPP Gateway: contact us quickly!
Goals of the GOLPP Study Group:

- Describe pathology
  - Peripheral nerve and muscle biopsy (at time of surgery)
  - Diffusion tensor MRI (to look at brain and spinal cord)

- Post mortem analysis (when possible):
  - Brain & spinal cord
  - Peripheral nervous tissues
Goals of the GOLPP Study Group:

- Identify incidence in predisposed breeds
- Enable earlier diagnosis and accurate assessment of stage
- Provide more accurate prognosis – ie, what to expect
- Seek better ways of managing dysfunctions / slowing progression
- Identify causative mutation
- Develop screening test
Where we are now...

- Diffusion tensor imaging MRI – 5 affected, controls
- Esophageal stanchion - built
- Positional esophagram study – underway
- TECA 5 channel EMG/NCV/SEP system - underway
- AKC Canine Health Foundation full grant due
- Morris Animal Foundation grant submitted
- Client information handouts and brochures
- Support from the Newfoundland Club of America - yes
- Support from Labrador Retriever Club Inc. - yes

Future directions … Similarity to late onset human conditions?
Thank you.