EVALUATION OF THE CANINE REHABILITATION PATIENT

Lisa Bedenbaugh, PT, CCRP
Director of Rehabilitation
North Georgia Veterinary Specialists
Buford, GA

General Topics

- Safety of the examiner, owner and pet is important. All staff handling the pet should be well-versed in animal behavior and restraint.
- You need to have an understanding of the different "normals" between breeds. A curved topline is normal for a Greyhound, but not a Labrador Retriever. Knowledge of differing gait styles, range of motion/flexibility and other anatomical variances is crucial.
- You also need to have an understanding of the different ailments found in different breeds, and at different ages, to assist you in forming a differential diagnosis.

Subjective

- This is history received from the owner, as well as previous medical history received from the referring veterinarian and includes:
  - Past medical and surgical history
  - Any previous injuries/flare ups
  - History of present ailment/condition bringing the pet to rehab
  - Exercise/use of pet: does the dog work/compete?
  - Pet's environment- is yard fenced/unfenced? Lives with other pets in home?
  - Current medications/supplements
  - Current diet/feeding schedule

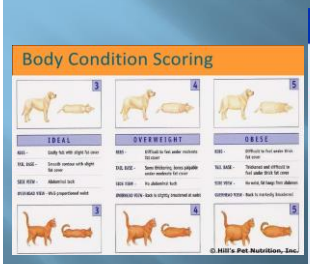
Objective

- This includes the clinician's observations and physical exam findings.

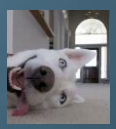
Overall appearance/body condition:

- Skin and coat: Shiny, dry, crusted, etc?
- Eyes/ears: Clear, red/inflamed, watery, etc?
- Teeth/gums: Are gums pink and moist? Are teeth clean, worn, etc?
- How does the pet move around the room? What is their posture like?
- Do they appear in pain? (lethargic, panting, stiff/guarded)
- Body Condition Score: Rates whether the pet is underweight, appropriate or overweight. Can be on a 0-5 or 0-9 score, depending on rating scale used.

Objective



Objective



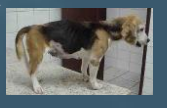
Behavior/attitude:

- Is the dog friendly, nervous, curious?
- Will they take treats?
- This is important to assess, as it will guide your exam and treatment.

Pain:

Look for flinching, shivering, "look backs", widened eyes, changes in respiration/panting, vocalizing, protecting the affected area. They may also lick/chew at a painful area.

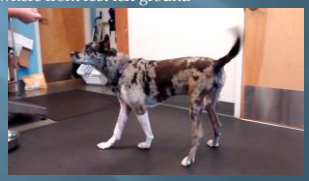
Can grade pain on a 1-10 scale



Objective

Gait Analysis: Watch the dog at a walk and trot (if possible). Watch them circle both ways.

- Check stance time and step length of each limb
- Watch for head bobbing
- Watch for "2-tracking"/"crabbing"- hind feet should fall almost where front feet left ground



Objective

Functional Strength and Mobility: This assesses the pet's ability to perform daily functional tasks.

- Transitional movements (sit to down, sit to stand)
- Walking distance (could perform a 3-minute walk test)
- Climbing stairs, jumping in/out of vehicle
- 2-leg/3-leg standing (tests neuromuscular control)

Validated functional tests for canines:
- C-TUG- Canine Timed Up and Go
- Bioarth Functional Scale
- Canine Brief Pain Inventory

Objective

Range of Motion: In veterinary medicine, the acute angles of joints are measured, rather than going off the "anatomical zero". Thus, flexion measurements are small, extension measurements are large.

Normal carpal extension is around 210- 230 degrees

For a quick screening of active cervical and thoracolumbar motion, you can do "cookie stretches".

Girth Measurements: Done in place of manual muscle testing. Use a bony landmark, then document how far up/down from that point where you are taking the measurement, so it is reproducible. Using a Gulick tape measure will help with accuracy and interater reliability.

Objective

Palpation: When possible, save the suspected painful area for last. Use light pressure initially, then if pet allows, can move deeper.

Look for:
- heat
-tightness/trigger points/"knots"
-areas of pain/flinching/tenderness
-crepitus
-medial buttress
-thickening around joints
- atrophy/hypertrophy
-scar tissue/adhesions

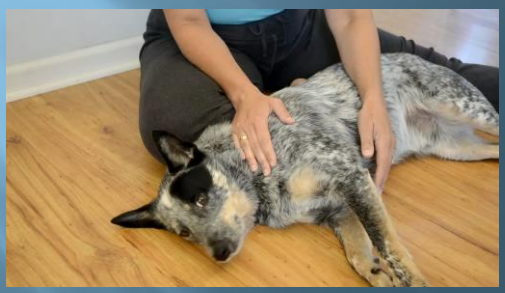
Objective

Passive joint mobility: Can assess passive joint play in the spine and in the peripheral joints. Look for areas of pain, restriction or crepitus.

Orthopedic special tests:
- Supraspinatus test
- Biceps test
-Medial shoulder instability/abduction test
-Ortolani test
-Iliopsoas test
-Cranial drawer/tibial thrust

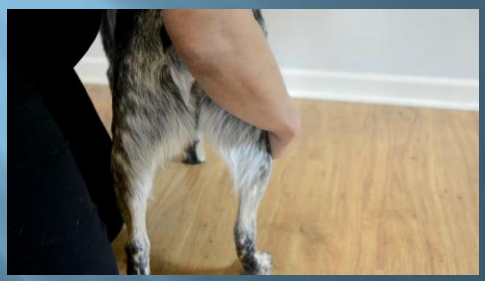
Supraspinatus and Biceps Test

Shoulder Abduction Test



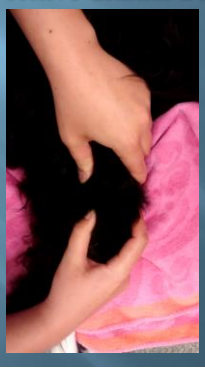
Ortolani Test

Iliopsoas Test



Drawer and Iliopsoas Test

Positive Cranial Drawer



Objective

Neurologic Testing:

-Reflexes (primarily patellar)
-Panniculus response (tests superficial pain)
- Hopping
-Deep pain
-Flexor withdrawal
- Conscious Proprioception

Assessment

- Summarizing the findings and using clinical reasoning to come up with a pathofunctional diagnosis.
- If there is a discrepancy between findings and the diagnosis from the referring veterinarian, consultation with that veterinarian is imperative.
- The functional deficits and problem areas should be listed.

Assessment

- The assessment should provide a prognosis for improvement, including a time course. Any other pre-existing conditions should be taken into account when projecting the expected level of improvement.

Plan of Care

- Consists of:
  - Anticipated goals/expected outcomes
  - Predicted level of improvement
  - Interventions to be provided
  - Frequency and Duration