Introduction to Mammal Physical Exams

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What is a physical exam?

"Physical examination is the process of evaluating objective anatomic findings through the use of observation, palpation, percussion, and auscultation. The information obtained must be thoughtfully integrated with the patient's history and pathophysiology"

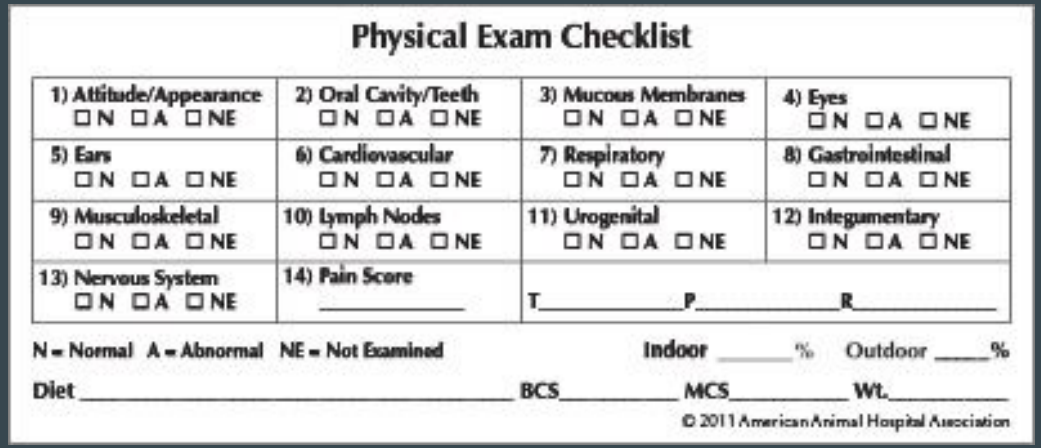
- Clinical Methods: The History, Physical, and Laboratory Examinations

Why are physical exams important?

- Your patients cannot tell you what is wrong!
  - What you are able to observe is very important
- A thorough physical exam allows you to evaluate body systems in a systematic order and helps avoid tunnel vision or bias
- Allows you to decide on next steps and a treatment plan

Develop a System

- Create a systematic approach to your physical exam and stick with it!
- You are less likely to miss something if you approach each patient's physical exam in the same manner
- For example: evaluate your patient from "head to tail"
- Use an exam sheet to record your findings and remind you of the body systems you want to check



Physical Exam Checklist

1) Attitude/Appearance ☐N ☐A ☐NE	2) Oral Cavity/Teeth ☐N ☐A ☐NE	3) Mucous Membranes ☐N ☐A ☐NE	4) Eyes ☐N ☐A ☐NE
5) Ears ☐N ☐A ☐NE	6) Cardiovascular ☐N ☐A ☐NE	7) Respiratory ☐N ☐A ☐NE	8) Gastrointestinal ☐N ☐A ☐NE
9) Musculoskeletal ☐N ☐A ☐NE	10) Lymph Nodes ☐N ☐A ☐NE	11) Urogenital ☐N ☐A ☐NE	12) Integumentary ☐N ☐A ☐NE
13) Nervous System ☐N ☐A ☐NE	14) Pain Score _____	T_____ P_____ R_____	

N = Normal A = Abnormal NE = Not Examined Indoor _____% Outdoor _____%

Diet _____ BCS_____ MCS_____ Wt._____

Step 1: No touchy!

- Start your exam by observing your patient!
  - Observe how they move (ataxic, limping, etc.)
  - Assess mental status: are they aware of their surroundings? (BAR, QAR, Depressed)
  - Assess behavior
  - Assess the safety of situation
  - Count their respiratory rate and observe for respiratory effort

- This is especially important in many of the wildlife species that you will be seeing
- Many of the animals we care for are prey species and we will influence their exam by touching them

Physical Exam Tools

- Stethoscope
- Ophthalmoscope / otoscope
- Scale
- Penlight
- Gloves
- Cotton swabs
- Popsicle sticks

Vital Signs

Temperature

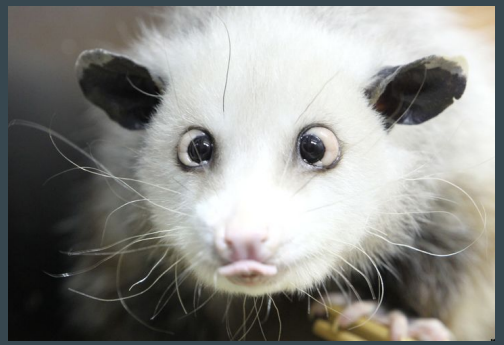
Pulse

Respiration

Pain: Learn signs of pain in the species that you are dealing with! Things like rapid heart rate, respiratory rate, facial grimace, inappetance, and lack of movement can indicate pain. However, it is also important to distinguish between pain and fear. Many of the signs may appear similar.

Body Condition

- Scoring based on species but most scales are 1-5 or 1-9
- Assesses overall wellbeing
- Can give clues to underlying problems
- Make sure to touch animal to distinguish between fur and fat
  - Spine
  - Hip bones



Systems Approach to the Physical Exam

Integumentary

- Look for any evidence of lacerations, wounds, or trauma
- Ears- discharge, odor, redness
- Skin- parasites, fur condition, irritation, swelling, wounds, masses, hydration status (skin tent)
- Nails and footpads- cracks, lacerations, missing nails

Musculoskeletal

- Watch the animal walk if possible

    Limping, shifting weight, inability to walk

- Palpate limbs for muscle tone and loss (evidence of disuse, may suggest a more chronic problem)
- Palpate joints and limbs for swelling
- Look for fractures
- Check for range of motion and crepitus

Nervous System

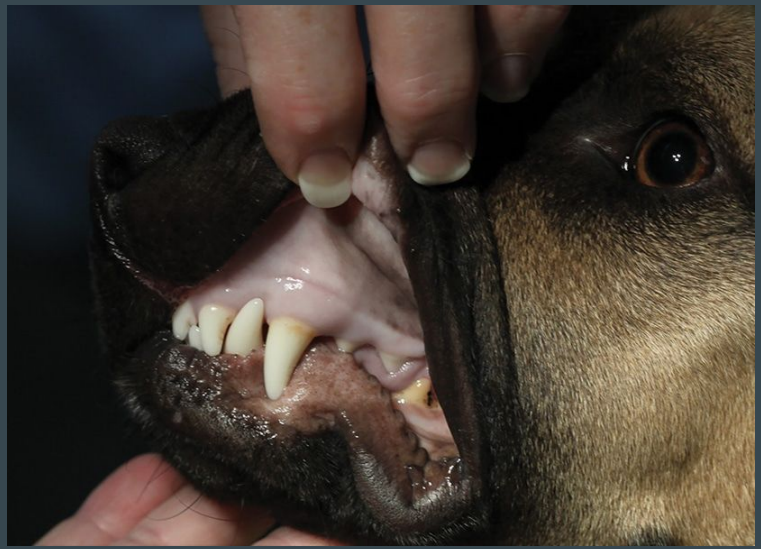
Animal's mentation:

- BAR, QAR, depressed, comatose
- Reaction to external stimuli
- Proprioception deficits, ataxia, circling
- Seizures
- Pupil size
- Nystagmus

Circulatory

Heart rates vary by species and can be increased with arousal

- Listen in different locations
- Listen for murmurs
- Check pulse strength, rate, quality
- Muffled sounds
- Perfusion indicators
    - Mucus membrane color (MM)
    - Capillary refill time (CRT)

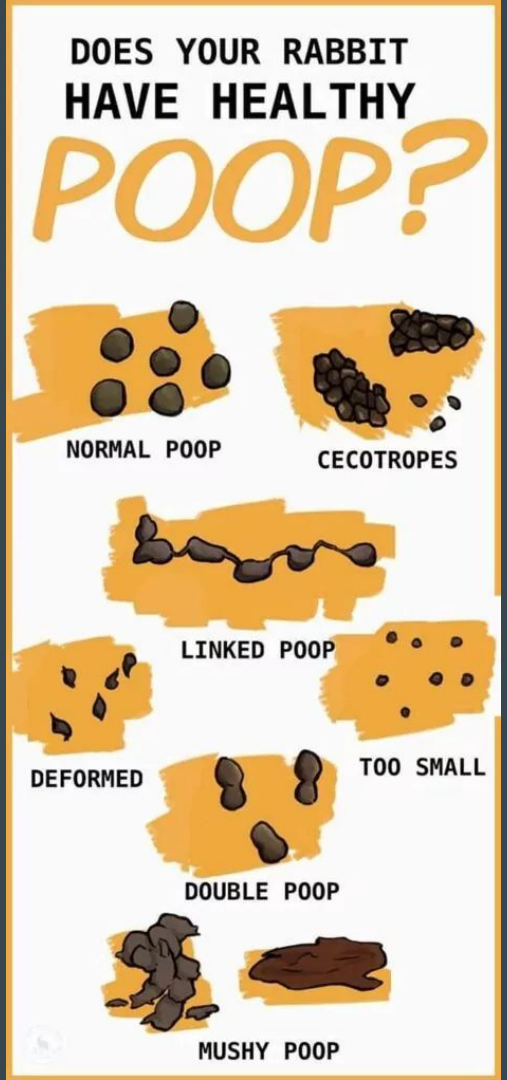


Respiratory

- Observe breathing effort without touching animal
    - Ideally before the start of the exam
- Nose - discharge, symmetry, abnormal sounds
- Stethoscope - wheezes/crackles/absence of breath sounds

Gastrointestinal

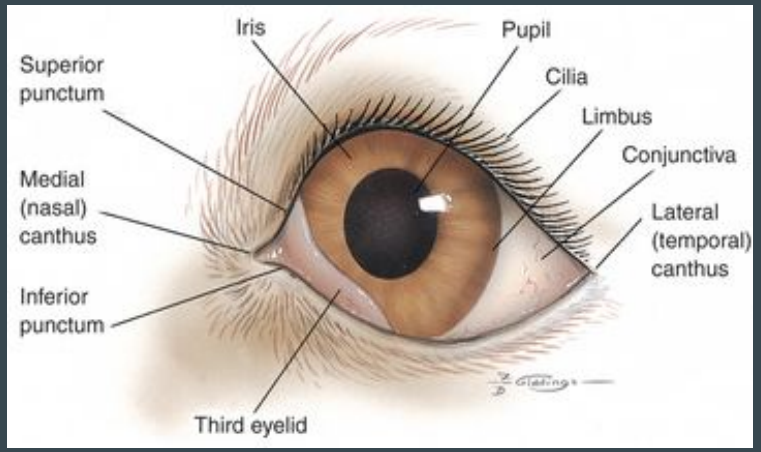
- Mouth - teeth, gingiva color, tongue
- Fecal sample - parasites, check consistency
- Auscultation in hind-gut fermenters for gut sounds (rabbits)
- Abdominal palpation - distension, masses, foreign bodies, pain



Abdominal Palpation

- Cranial abdomen
    - Stomach, liver, spleen, pancreas, small intestine
- Mid-abdomen
    - Spleen, kidneys, small intestine
- Caudal abdomen
    - Urinary bladder, prostate, uterus, colon
- Feel for anything unusual: masses, distension, pain, etc.

Ocular



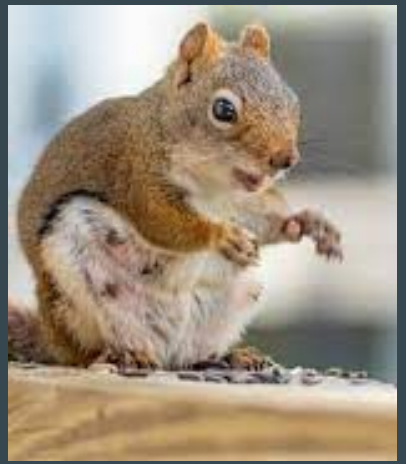
- Adnexa: eyelids, conjunctiva, third eyelid
- Cornea, iris, lens
- Fundic Exam: Retina, choroid, vitreous
- Note any discharge, redness, or swelling
- Use light to see defects on corneal surface
- Special tests
    - Tonometry (pressure), fluorescein dye (corneal ulcers), conjunctival swab (inflammation)

Urinary

- Palpate kidneys
    - Usually just the left is palpable
- Palpate the bladder
- Can the animal urinate?
- Collect urine for USG
- Can they concentrate their urine?

Reproductive

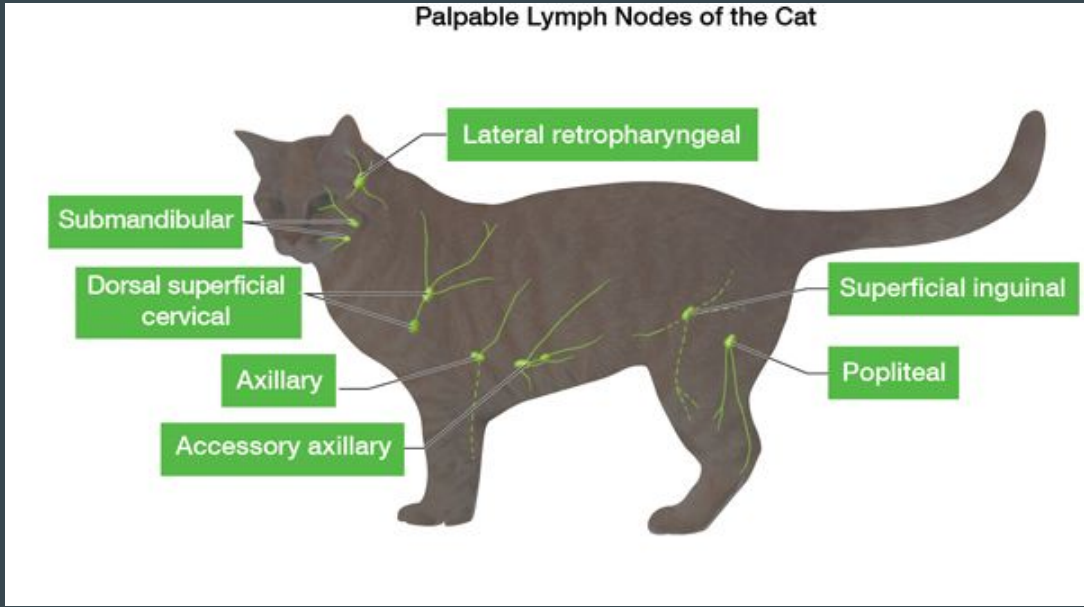
- Females: palpate mammary glands for masses, check vulvar membranes for swelling or discharge
- Males: Observe penis (if possible) and testicles for swelling and masses
- Note any prolapse: vaginal, uterine, rectal



Lymphatics

- Will Swell if Infection is Present:
  - Mandibular lymph nodes
  - Superficial cervical
  - Popliteal
  - Axillary
  - Inguinal

***Feel for abnormal swellings, if you can't feel anything it is likely normal



Common Abbreviations

TPR: Temperature, pulse and respiratory rate

BAR: Bright, alert and responsive (responsive animal who is aware of their surroundings –not acting sick)

QAR: Quiet, alert and responsive (still aware, but not as happy/active)

PLN: peripheral lymph nodes

BCS: Body Condition Score (1-9)

OS: Left eye, OD: Right eye, OU: Both eyes

AS: Left ear, AD: Right ear, AU: Both ears

d/c: discharge v/d: vomiting/diarrhea, c/s: coughing/sneezing

GA: general appearance

INTEG: integument

EENT: eyes, ears, nose, throat (and mouth)

CV: cardiovascular

RESP: respiratory

M/S: musculoskeletal

NERV: nervous

ABD: abdomen (gastrointestinal / genitourinary)