

**Introduction to
Mammal Physical Exams**
 Susie Jones
 NC State College of Veterinary Medicine
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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.

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Why is it Important?

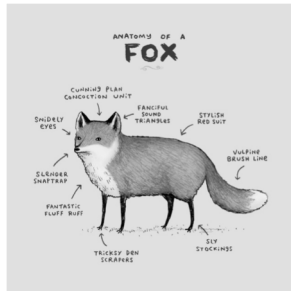
- Strong observation skills are critical- patients cannot tell you what is wrong!
- Formulate your next steps
- Can lead to a diagnosis and subsequent prompt treatment
- Helps to avoid tunnel vision and bias



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Be Systematic

- "Head to tail"
- Find a way that you are comfortable with and be thorough
- Use an exam sheet to guide you
- Find a system and use it for every patient, adapting as needed



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Before You Touch the Patient

- Observe the animal from afar before disturbing
 - BAR, QAR, lethargic, depressed, comatose
- Watch behavior
- Watch respiration rate and effort
- Observe animal's stance
 - Asymmetry or ataxia
- Assess safety



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Some Physical Exam Tools

- Stethoscope
- Ophthalmoscope/Otoscope
- Scale for recording weight
- Penlight
- Gloves- latex or nitrile
- Popsicle sticks
- Cotton swabs



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Vital Signs

- Temperature (T)
- Pulse (P)*
- Respiration (R) *
- Pain-Try to learn to recognise signs of pain in your species. This can include rapid breathing, rapid heartrate, inappetence, grimacing of facial muscles, lack of movement
- It is important to distinguish pain from fear

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Body condition


- Scoring based on species but most scales are 1-5 or 1-9
- Assesses overall wellbeing
- Can give clues to underlying problems



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Integumentary

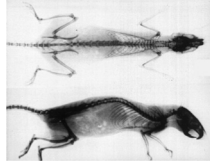
- Look for lacerations or other evidence of trauma
- Describe lesions
- Ears - discharge, odor, redness
- Skin - parasites, fur condition, irritation, swelling, wounds, masses, hydration status (skin tent)
- Nails and footpads - cracks, missing nails



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Musculoskeletal

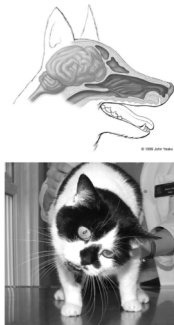
- Palpate limbs for muscle tone and loss (evidence of disuse)
- Palpate joints and limbs for swelling
- Watch the animal walk if possible
 - Limping, shifting weight
- Look for fractures
- Check for range of motion and crepitus



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Nervous System

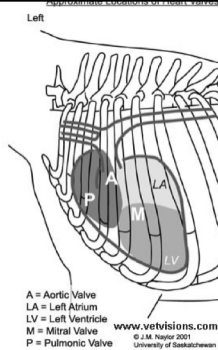
- Animal's mentation:
 - BAR, QAR, depressed, comatose
- Reaction to external stimuli
- Proprioception deficits
- Seizures
- Pupil size
- Nystagmus



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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)



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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



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Gastrointestinal

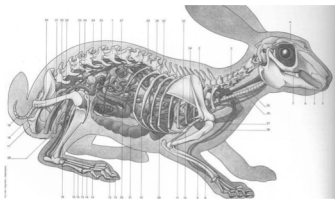
- Mouth - teeth, gingiva color, tongue
- Fecal sample - parasites, check consistency
- Auscultation in hind-gut fermenters for gut sounds (rabbits)
- Abdominal palpation - distension, masses, foreign bodies, pain



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Abdominal Palpation

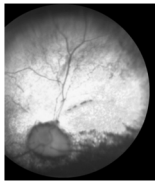
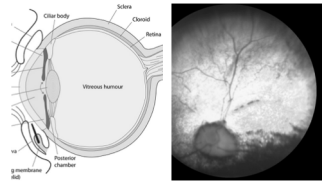
- Cranial abdomen
 - Stomach, liver, spleen, pancreas, small intestine
- Mid-abdomen
 - Spleen, kidneys, small intestine
- Caudal abdomen
 - Urinary bladder, prostate, uterus, colon



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Ocular

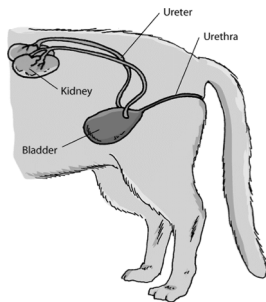
- Adnexa: eyelids, conjunctiva, third eyelid
- Cornea, iris, lens
- Fundic Exam: Retina, choroid, vitreous
- Note any discharge, redness, or swelling
- Use light to see defects on corneal surface
- Special tests
 - Tonometry (pressure), fluorescein dyes (corneal ulcers), conjunctival swab (inflammation)



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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?



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Reproductive

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

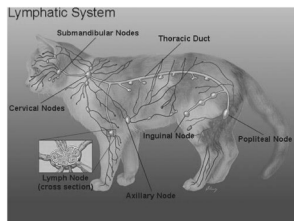


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Lymphatics

- Mandibular lymph nodes
- Superficial cervical
- Popliteal

- Axillary
- Inguinal



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Common Medical Abbreviations

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| <ul style="list-style-type: none"> • 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) | <ul style="list-style-type: none"> • 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) | <ul style="list-style-type: none"> • 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 |
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