

Physical Examination: The Cornerstone of Veterinary Medicine

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For every clinical problem missed for not knowing, 10 will be missed for not looking. Physical examination (PE) is the cornerstone of diagnostic medicine—*everything* the clinician does for a patient is based on its results. If something small is missed during the PE, it can complicate later diagnostic problem solving.

Bad Medicine, Bad Business

After graduation, my first job boasted 6-minute appointments. If a patient came in for what the client reported to be a bad ear, that was all I was to examine—just the ears. My boss considered it a waste of time and resources to look at the rest of the patient. In addition, he felt it was good business to churn through the appointments, 10 per hour, rather than examining the entire animal.

In actuality, it was bad medicine *not* to look at the entire animal—what if the ear problem was related to allergies, foreign bodies, or metabolic issues? From a business perspective, if only the ears are examined, one may miss the heart murmur, dental disease, cataracts, and other, possibly more pressing, medical problems.

Important Considerations

Consistency must be a habit when it comes to PEs. By developing a consistent PE routine, the clinician is less likely to miss examining an area. The clinician should stick to a pattern when conducting the examination (eg, nose to tail, ears to feet). In cases in which the client brings a pet in for a specific complaint, the clinician–client relationship may benefit from focusing on the area of complaint before proceeding with a consistent, routine PE. The client may also benefit from an explanation that the presenting complaint may have roots elsewhere, emphasizing the necessity of the PE.

A PE can take on many forms and purposes (eg, annual, presurgical, health certificate, geriatric, insurance clearance, pre- or postpurchase examination). The clinician must decide how to approach these types of examinations and what services will be included or offered with them. For instance, for an annual examination on a young dog, the author is not likely to recommend an ECG unless the patient shows clinical signs (eg, heart murmur) or has a breed predilection to cardiac disease (eg, Cavalier King Charles). However, all senior pets (>8 years for small and medium breeds, >5 years for large and giant breeds) routinely get ECGs. Following are the steps this author considers essential to performing a thorough PE.



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Before the Examination

First, the technician should obtain temperature, pulse, and respiratory rates. Blood pressure should be taken at the start of the examination, before the patient has a chance to become anxious and affect results. This can be done by the technician before the veterinarian arrives.

The history may be the most important part of any PE. It may be taken by the veterinary technician during check-in and should include (but not be limited to): Presenting complaint, patient age, spay/neuter status, vaccine history, ecto- or endoparasite preventive medications, issues with administration of prior or current medications, behavioral issues, health status of other household pets, and medical history. Querying owners several times during history taking—and using different wording—may yield more information about a patient's relevant history. Clients often leave things out or do not think things are important the first time around.



The technicians should then record the date of when the presenting problem began, whether the problem is progressive or stable, and anything else deemed relevant by the client.

STEP-BY-STEP ■ PHYSICAL EXAMINATION

STEP 1

Observe. Before handling the animal, evaluate its movement by watching it on the table or, if feasible, walking around the room. Vision can be evaluated by turning the lights down or off to watch the patient navigate in dim light, whereas hearing can be evaluated by calling to the patient or making a loud noise out of its line of sight.

Author Insight
For new pets, this author scans for a microchip at the beginning of the examination.

STEP 2

Examine eyes, ears, nose, and throat. Include capillary refill time, mucous membrane color, and dental score. Perform an otoscopic (with tympanic membrane evaluation) and ophthalmic examination (including evaluation of the fundus).



PE = physical examination

STEP 3

Conduct a cardiopulmonary examination. Include auscultation of the heart and lungs, assessment of pulse rate and quality, measurement of heart rate and characterization of heart rhythm, evaluation for murmurs, characterization of respiratory pattern, and notation of quality of lung sounds.



STEP 4

Palpate the abdomen. Palpate kidneys, liver, spleen, internal lymph nodes, and intestines. This can be difficult on large or obese patients. Note the patient's response to palpation (eg, comfortable, apparent pain or discomfort [eg, splinting]).

STEP 5

Perform musculoskeletal examination. Look for gait abnormalities and deformities, palpate all joints, perform an orthopedic examination (eg, patellar luxations, drawer signs), and feel for crepitus and joint effusions. Record a body condition score. For overweight patients, note ideal weight in the chart.



STEP 6

Palpate all lymph nodes. Measure and note abnormal lymph nodes.



continues

STEP 7

Check integuments. Evaluate the fur and skin; look for ectoparasites, lesions, masses, odor, texture, quality, color, and temperature. Perform skin tenting in several places to estimate hydration. Note hydration score in patient record.

STEP 8

Perform rectal examination, and palpate the anal glands.

Author Insight

There is considerable debate about whether a rectal examination should be performed at every examination. The author recommends rectal examinations for dogs, particularly for all intact males, all males with urinary issues, older male dogs, and any patient with issues relating to defecation. Cats should not receive a rectal examination unless there is radiographic or ultrasonographic evidence of prostate enlargement.

STEP 9

Perform a basic neurologic examination. Include a cranial nerve evaluation and test proprioception and placing. For patients presenting with neurologic signs, conduct a comprehensive examination.



Author Insight
Dropping a cotton ball and watching the patient follow its movement is an excellent way to evaluate vision and tracking.

ADDITIONAL CONSIDERATIONS



These are the basic steps for a PE; however, depending on the type of PE and the presenting complaint, additional diagnostics may be warranted and should be recommended to the client. Additional testing options should be discussed with the client, even if those tests are not generally part of an annual PE. For instance, the American Heartworm Society recommends biannual testing. Some tests, such as CBC, urinalysis, radiography, and ECG may also be warranted. Unnecessary or unwarranted testing should be avoided; for example, a yearly FeLV test for an inside-only apartment cat is likely unnecessary.

PE = physical examination



Closing Thoughts

Although some clients may prefer to avoid a thorough PE on their pet out of fear of problems being found, it is important that the veterinary team helps clients understand that finding problems early helps safeguard pets and ensure they receive proper care. ■ **cb**

The author wishes to thank Kristin Hall, DVM; Kirsten Ebb, CVT; and Mike Stachowski for help in preparation of this article.



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1. C. Sitzman, Evaluation of a hydrophilic gingival dental sealant in beagle dogs. *J Vet Dent* 2013; 30 (3): 150-155.

2. C.E. Harvey, Effect of brushing frequency on efficacy of tooth brushing in dogs. Original Clinical Research presented at the 28th Annual Veterinary Dental Forum, Atlanta, GA, Nov. 16, 2014, submitted for publication.



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