



Patient History and Physical Examination

Nicole Atkens Humphreys

Introduction

One of the most important parts of a medical record is the patient history. Without an accurate and detailed history, the most experienced veterinarian may not be able to define the problems of a particular patient. A thorough history may be time consuming, but in a busy practice, a technician can begin the history-taking process thus allowing the veterinarian to ask the client other pertinent questions. The key to history taking is asking the right questions to obtain the most important information. History-taking questions are important details that alert the veterinarian or veterinary technician to problems or symptoms that may be contributing factors to the patient's ailment. Questions will vary among species being evaluated, but in general they should remain unbiased so as not to lead the client toward a specific answer.

Because cats cannot speak, the owner is relied upon during the patient history-taking process. Asking a question in an unbiased fashion may require the owner to reflect on a change in the pet's behavior and overall health and draw conclusions whether this change has been a positive or negative one. More often than not, a question may have to be asked more than once but phrased in a slightly different way to make sure the owner understands the question and is consistent with answers. When asking specific questions be mindful of the owner's ability or inability to observe the cat. Questions such as "Does your cat have diarrhea?" may not be as suitable as "Have you noticed a change in your cat's stool?"

The medical record is comprised of pertinent facts about the patient's life and health history. It can be used to describe past and present illnesses as well as treatments that were ordered by the clinician. The history provided by the animal's owner, the veterinarians' observations, and results of any laboratory tests that were performed help determine a diagnosis or course of treatment for a particular patient.

It is important to create a complete patient history. Begin with owner's name, address, and telephone numbers (home, work, cell, pager, fax, etc.). The cat should be assigned an identification number or a case number. The cat's name and signalment (age, gender, breed, and species) should also be entered into the chart so the correct history is linked to the patient.

Use of a standard history form ensures that all of the pertinent questions are asked (Table 1-1).

Signalment

The signalment of an animal is the age, gender, breed, and species; these are crucial pieces of data for developing the history and ruling out specific problems. Certain disease processes and ailments are inherited or are more common in certain breeds. Age is relevant in obtaining a history for many reasons. Older patients may show similar symptoms but for different reasons than younger ones. For example, a young energetic and curious cat may vomit due to a foreign body. An older more geriatric cat may vomit due to chronic pancreatitis, renal disease, or small bowel disease. Knowing the age of the patient may alert the technician or veterinarian to ask age-appropriate questions regarding the issues. Knowing the breed of an animal is especially helpful when trying to rule out

genetic diseases. Maine Coon cats commonly develop hypertrophic cardiomyopathy (HCM). When a Maine Coon cat has cardiac signs, the veterinarian will consider HCM and perform relevant tests. Knowing reproductive status helps when considering disorders related to gender.

Chief Complaint and History of Illness

It is important to determine the primary reason for the visit. This is known as the chief complaint. It is crucial that the owner is given time to elaborate on the reason the cat was brought in. Because this process can be prolonged if the conversation is not controlled, specific questions will quickly lead to a definitive reason for the visit. Not focusing on the primary complaint can lead to improper tests or misdiagnoses.

Understanding the chief complaint will lead to questions regarding severity and duration. This information will determine how aggressive the diagnostic workup should be and how quickly therapy must be instituted.

Past Illness and Surgical History

Past medical illness and surgical history can lead to a more rapid diagnosis and greatly affect the outcome of certain cases. For example, a cat brought in for increased urination can have its presenting sign as a result of current furosemide administration for cardiac disease instead of renal failure or diabetes. Not knowing the cat was given a drug that can cause increased urination may result in unnecessary tests.

Dietary and Environmental History

Knowing the type of food and the daily quantity consumed will provide helpful insights when dealing with weight change (increased or decreased), obesity, and other problems such as vomiting or diarrhea. Diet is especially important when obtaining a history for feline patients because cats are frequently picky eaters only consuming highly palatable foods. The timing of a food consumption change can be helpful in understanding the duration of a problem. An understanding of a cat's dietary preferences can be helpful in establishing quality dietary intake in the hospital setting.

A cat's habitat is also important in assessing the patient. It is important to know if a cat is an indoor cat, an indoor-outdoor cat, a supervised outdoor cat, or a free-roaming outdoor cat. Environmental situations pose a wide variety of potential toxins and hazards that can contribute to problems and illnesses. Outdoor cats are more prone to ethylene glycol poisoning, retroviral conditions (feline immunodeficiency virus [FIV] feline leukemia virus [FeLV]), infections, and trauma. It is also important to understand the number of pets and species in the household because households with ten cats or more are more prone to gastrointestinal and respiratory diseases and behavior problems.

Complete Physical Examination

The physical examination is one of the most important parts of a diagnostic workup. Despite the number of blood, urine, and imaging tests available, all of those must be interpreted in light of physical

TABLE 1-1: History and Examination Record

History and Examination Record		
Doctor: _____		Technician: _____
Species: _____	Sex: M Mn F Fs	Age: _____
Vaccines: <input type="checkbox"/> Never <input type="checkbox"/> Current <input type="checkbox"/> Not current		Last visit: _____
Last time(s) given _____		
Weight: _____	Last Weight & Date: _____	Temp: _____
Chief Complaint: _____		
Appetite: <input type="checkbox"/> Anorexia <input type="checkbox"/> Greatly reduced <input type="checkbox"/> Slightly reduced <input type="checkbox"/> Normal <input type="checkbox"/> Slightly increased <input type="checkbox"/> Greatly increased Duration from normal: _____		
Diet: List foods, canned vs. dry, and % of each _____		
Meds taken including HW and flea control products: _____		
Vomiting: <input type="checkbox"/> Never <input type="checkbox"/> < 1/mo <input type="checkbox"/> 1/mo <input type="checkbox"/> 2-3/mo <input type="checkbox"/> 1/w <input type="checkbox"/> > 1/w		
Stool: <input type="checkbox"/> Hard <input type="checkbox"/> Normal <input type="checkbox"/> Watery <input type="checkbox"/> Pancake Batter <input type="checkbox"/> Soft Serve Ice Cream		
Color: _____		
Urine: <input type="checkbox"/> Less than normal amt <input type="checkbox"/> Normal amount <input type="checkbox"/> More than normal amt		
Blood present: _____		
Activity level: <input type="checkbox"/> Very lethargic <input type="checkbox"/> Reduced <input type="checkbox"/> Normal <input type="checkbox"/> Increased <input type="checkbox"/> Sleeps less		
Exam Notes: _____		

Plan: _____		

Follow-up: _____		

TABLE 1-2: Sample History Questions for Body Systems

System	Sample Questions
General Attitude	Is your cat playful? Is it interested in its surroundings?
Integument	Is your cat scratching, licking, or biting more than usual? Do you notice changes in your cat's skin or hair coat?
Respiratory	Does your cat have nasal discharge? Have you noticed your cat sneezing, coughing, or wheezing?
Cardiovascular	Have you noticed a change in your cat's activity level? Is respiration rapid or labored?
Gastrointestinal	Has your cat vomited? If so, how often? Have you noticed a change in stool?
Urogenital	Is your cat intact? Have you noticed changes in your cat's urinary habits? Does your cat drink more or less than usual?
Nervous	Does your cat seem alert and aware of its surroundings? Have there been any seizures?
Musculoskeletal	Have you noticed lameness, weakness, or reluctance to move or jump?

examination findings. It is important to develop a systematic approach so no aspect of the examination is inadvertently omitted. Some choose an approach based on major body systems as described. Others prefer a "geographic" approach beginning with the head and progressing caudally. Regardless of the approach, it should be used consistently.

The physical examination process begins when the patient arrives in the examination room. The first impression of how the cat looks and acts is essential, although one must realize that some cats are unusually withdrawn or aggressive in a clinical setting. It is important to recognize the "Three A's of Examination:" Appearance, Attitude, and Awareness are significant segments of an initial examination. It is important to

remember that cats like to explore. Many times when a cat is taken out of its carrier in an examination room, it wants to smell and explore its new surroundings. Take note if a cat seems uninterested or unable to respond to the new stimuli of the examination room. Is the cat trying to hide? Does the cat seem angry? These subtle observations can also determine how the cat will act during examination. It is important that every observation is documented in the patient record, and each entry be initialed by the observer. This eliminates any confusion when trying to document entries regarding history and examinations.

Another component of the physical examination is the assessment. Simply stated, each system or body region is examined for abnormalities



Figure 1-1 There was some evidence of flea dirt on this cat's hair coat; however, when the hair was brushed backward copious amounts of flea dirt were seen. Brushing the hair coat backward often reveals abnormalities that can easily be missed.



Figure 1-2 Inconsistent pupillary size, anisocoria, is an important finding that can be missed with a casual glance of the cat's eyes.

and issues. Although there is no particular order for examining body systems a usual routine pattern should be established. Most practitioners will start with the head and progress to the tail. This ensures that no system is overlooked. The veterinarian may also ask certain questions while examining each part to get a better understanding of each system (Table 1-2).

Skin, Eyes, and Ears

The integument, or skin, can be examined while examining other body systems or as an overall system itself. It is crucial to remember to examine all areas, such as the skin on the extremities as well as the underside of the cat. Many times brushing the hair coat in the opposite direction of growth will expose skin and many abnormalities that may be present (Fig. 1-1). Skin discoloration, hair loss, ulcerative or proliferative lesions, and pustules all should be marked in the record with their locations. Also note whether the hair coat is matted, oily, dry, or normal.



Figure 1-3 Sensitive thyroid palpation is performed on one side at a time with the tip of one's index finger placed in the groove between the trachea and the sternohyoideus muscle. It is important that the chin be lifted 45 degrees and turned 45 degrees away from the side to be palpated.

Following general skin appearance, the ears and eyes should be examined. An ocular examination includes examination of the external and internal ocular structures. Observe for ocular discharge and the nature of the discharge (serous or purulent), scratches on the cornea, inflammation of the conjunctiva, and cloudiness of the lenses. It is also important to note pupil size, consistency between pupil size (Fig. 1-2), and pupillary response to light.

Examining the ears involves visual as well as palpation of the external ear. Note if the pinnae exhibit hair loss, crusting, or dermatitis or if there are masses present. When examining the external ear canal, it should be clear of hair, mucus, and debris. If mucus or discharge is present, record color, smell, and consistency of the exudate. Use an otoscope to examine the ear canal for discharge, redness, ear mites, and foreign objects; evaluate the tympanic membrane for color and to determine intactness.

Respiratory System

Examining the respiratory system should begin by observing the cat's respiration rate and depth. The normal respiratory rate for feline patients is 16–30 breaths per minute. Observe for nasal discharge, abnormal sounds, such as coughing or wheezing, and any other indications of difficulty breathing. Lung sounds are heard with a stethoscope. The lung sounds of a normal cat are often heard during inspiration only. Normal air passage through the airways is usually barely audible so when feline patients present with easily heard lung sounds it is usually significant. The lack of respiratory sounds can also be significant, often signaling fluid accumulation in the pleural space (pleural effusion). Crackling or popping noises indicate abnormalities in the respiratory system and should be recorded.

Cardiovascular System

Examining the cardiovascular system begins by visualizing the cat's respiratory rate and depth. Next, the mucus membrane color and capillary refill time should be determined; they are a preliminary measure of cardiac output. Look at the color of the membranes and then blanch the color of the membranes by pressing your finger on the gums; count by seconds how long it takes to recover the color. Normal capillary refill time is 1–2 seconds. Times greater than 2 seconds can indicate poor

cardiac output, which can be due to cardiac disease, dehydration, or other ailments. Palpation of the jugular and the femoral pulses is performed to monitor for adequate blood flow. Heart rate and pulse quality should also be recorded. Femoral pulses should be palpated while listening to the heart with a stethoscope to ensure there is a pulse for every beat of the heart. Cardiac auscultation should progress to listening for rate, rhythm, and the presence of a murmur. Murmurs are assessed by five indicators: intensity, grade, quality, timing, and location, which are factors in determining the need for further tests. See Chapter 20.

Gastrointestinal System

Although the gastrointestinal (GI) system is considered abdominal in location, it actually begins in the oral cavity. Examining the mouth could reveal clues to GI disease, including gastritis and GI foreign bodies. A foul odor coming from the patient's mouth may be more than just "vomit breath." Malodorous smells coming from the pharyngeal area can indicate impactions further down the gastrointestinal tract. Palpate the neck gently with one hand on both sides to feel for any masses or objects. Abdominal auscultation is used to detect gut sounds. The next step is abdominal palpation. A one-handed palpation technique may be easier to use in feline patients because of their small size. With the thumb on one side of the abdomen and four fingers on the other, the internal structures can be examined. The perineal area should be examined for masses, evidence of bowel movement problems, and inflammation.

Urogenital System

The feline kidneys can be palpated in most cats. They are about 4 cm longitudinally in the young adult cats and have a smooth surface. The full to half full urinary bladder should be palpable and is normally spherical in shape. The presence of uroliths or severe inflammation may

evoke a pain response. Although the uterus and ovaries of an intact female are not palpable in the nonpregnant queen, it is crucial to examine the mammary chains for masses and the testicles of intact male cats.

Nervous System and Musculoskeletal System

The nervous and musculoskeletal systems can be harder to examine than the others. Neurological examinations are performed when a patient has central nervous system (CNS) or peripheral nerve symptoms. Examining the musculoskeletal system includes palpating joints, muscles, and bony structures. The spine is examined for pain responses and reflexes.

Miscellaneous

Several feline diseases result in enlargement of the peripheral lymph nodes. The most commonly enlarged ones are the mandibular, prescapular, and popliteal. Those lymph nodes should be palpated in a normal cat so enlargement can be appreciated.

Hyperthyroidism is common in geriatric cats. If the thyroid lobes are normal they are not palpable (Fig. 1-3). However, enlargement that is palpable justifies performance of blood tests (usually a total T4) to evaluate thyroid function.

Suggested Readings

- Ettinger SJ, Feldman EC. 2000. *Textbook of Veterinary Internal Medicine*, 5th ed. Philadelphia: WB Saunders.
- McCurnin DM, Bassett, JM. 2005. *Clinical Textbook for Veterinary Technicians*, 5th ed. Philadelphia: Elsevier Health Sciences.
- Norsworthy GD. 2010. *The Feline Patient*, 4th ed. Ames: Wiley-Blackwell.
- Poffenbarger EM, McCurnin DM. 2001. *Small Animal Physical Diagnosis and Clinical Procedures*, 2nd ed. Philadelphia: Elsevier Health Sciences.