



SKILLS CHECK

Canine Chronic Pain Assessment

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Abstract

Any dog may experience chronic pain. While owners can play a key role in recognizing signs of chronic pain in dogs, identification and assessment of chronic pain are vital skills for the veterinary nurse. This article discusses the indications for and steps involved in performing a canine chronic pain assessment.



Take-Home Points

- Chronic pain can occur in animals at any age.
- Veterinary nurses should be able to teach anyone in the practice, as well as the client, how to successfully use a clinical metrology instrument.
- Dogs should be evaluated for pain, even if only by observation, at every veterinary visit.
- Videos taken at home can be helpful since the dog may not act the same at the hospital.
- Make sure to allow the client to voice any concerns they may have, especially if they do not recognize their dog's pain.

The recognition of pain is constantly evolving in both human and veterinary medicine, and the evidence for treating chronic pain as a disease in itself is growing.¹⁻³ While chronic pain is generally defined as pain lasting for more than 3 months, it can be more accurately described as maladaptive pain, or pain not associated with healing, and it is often associated with long-term health issues (**BOX 1**).³

Because animals cannot describe their own pain, pain assessment in dogs relies on several measures, such as behaviors reported by owners and physical signs evaluated by professional veterinary team members.² Caregivers (e.g., owners, family members) are in the best position to notice early signs of chronic pain; therefore, it is important to educate caregivers about gradual behavioral changes that may otherwise go unnoticed or be attributed to aging.³

RECOGNIZING PAIN

As dogs live longer, the prevalence of painful chronic conditions like osteoarthritis (**FIGURE 1**) has risen.³ However, veterinary personnel must recognize pain before they can treat it. Veterinary nurses should therefore be able to accurately use checklists, clinical metrology instruments (CMIs), and physical examinations to determine if chronic pain is present and report their findings to the veterinarian to aid in the development of a treatment plan. CMIs are standardized tools that measure activity, mobility, and function to assess pain and evaluate the effects of an intervention or treatment. CMIs used in assessing chronic pain in dogs are listed in **BOX 2**.

Indications for Assessment

Although chronic pain is best identified by someone

BOX 1

Causes and Examples of Chronic Pain³

Chronic inflammation

- Degenerative joint disease/osteoarthritis
- Chronic intervertebral disk disease
- Hip dysplasia

Nonosteoarthritis/nonmalignant conditions

- Amputation ("phantom pain")
- Lick granuloma
- Glaucoma
- Otic conditions
- Dental disease
- Dermatitis
- Gastritis
- Mucositis

Cancer

- Canine osteosarcoma
- Mammary tumor
- Nasal tumor
- Multiple myeloma
- Central nervous/spinal tumors
- Invasive cutaneous tumors

familiar with the pet, such as the owner, owners do not know what pain looks like unless they are educated to recognize it. Therefore, owners may have no idea that their pet is experiencing chronic pain, especially if the pet is aging. To help clients describe signs that may be related to pain, veterinary nurses can ask questions like



the ones below during wellness visits, either as part of regular screening or because the pet has noticeably changed. Such questions can also be useful when clients call because they have noticed a change in their pet's behavior.

- Have you noticed any increasingly diminished function and mobility that could indicate progressive disability? Does your dog not want to go outside as much or lack interest in playing?
- Do you notice any differences in your dog's activity level around the house? Does your dog have less interest in car rides or chasing squirrels? Less interest in meals or treats?
- Have you seen a change in how your dog stands, walks, takes stairs, jumps, or gets up?
- Do you notice a lack of grooming or excessive licking in a particular area?
- Have your dog's urination and defecation habits remained the same?



FIGURE 1. A dog with osteoarthritis in all joints showing compensatory changes in paws and stance. **(A)** Side view. **(B)** Posterior view.

BOX 2

Clinical Metrology Instruments for Maladaptive Pain in Dogs

- Helsinki Chronic Pain Index (HCPI)⁴
- Canine Brief Pain Inventory (CBPI)^{5,6}
- Cincinnati Orthopedic Disability Index (CODI)⁷
- VetMetrica Health-Related Quality of Life (HRQL)⁸⁻¹⁰
- Liverpool Osteoarthritis in Dogs (LOAD)^{11,12}
- Canine Osteoarthritis Staging Tool (COAST)¹³

Behaviors Associated With Chronic Pain

Chronic pain can lead to decreases in normal behaviors and increases in unusual ones. For example, dogs in chronic pain may socialize or play less with family members or other dogs, move around and/or wag their tail less, have less interest in hygiene and grooming, be less curious, and eat less. They may also become more aggressive toward people and other pets, more dependent on the owner (“clingy”), or more lethargic. They may guard a limb or body part, bite painful areas, lick the dorsal aspect of limbs, engage in sudden or excessive scratching, or display obsessive or compulsive behavior.^{4,14}

PAIN EVALUATION

When evaluating a dog for pain, knowledge of normal behavior and painful behavior is imperative. **BOX 3** lists examples of painful behaviors that might be observed during clinic visits, and **FIGURE 2** shows changes in posture caused by severe osteoarthritis. Prior to the visit, sedation (e.g., gabapentin, 5 to 10 mg/kg PO q8h to q12h; trazadone, 2 to 10 mg/kg PO q8h to q12h) may be helpful for nervous dogs.¹⁶

The following are basic steps that can be used in evaluating pain during any clinic visit:

- Evaluate the dog from a distance, watching it move.
- Watch its ability to settle down once in the examination room.
- Get on the same level as the dog (floor). Allow it to approach you. Talk to the owner if the dog is nervous

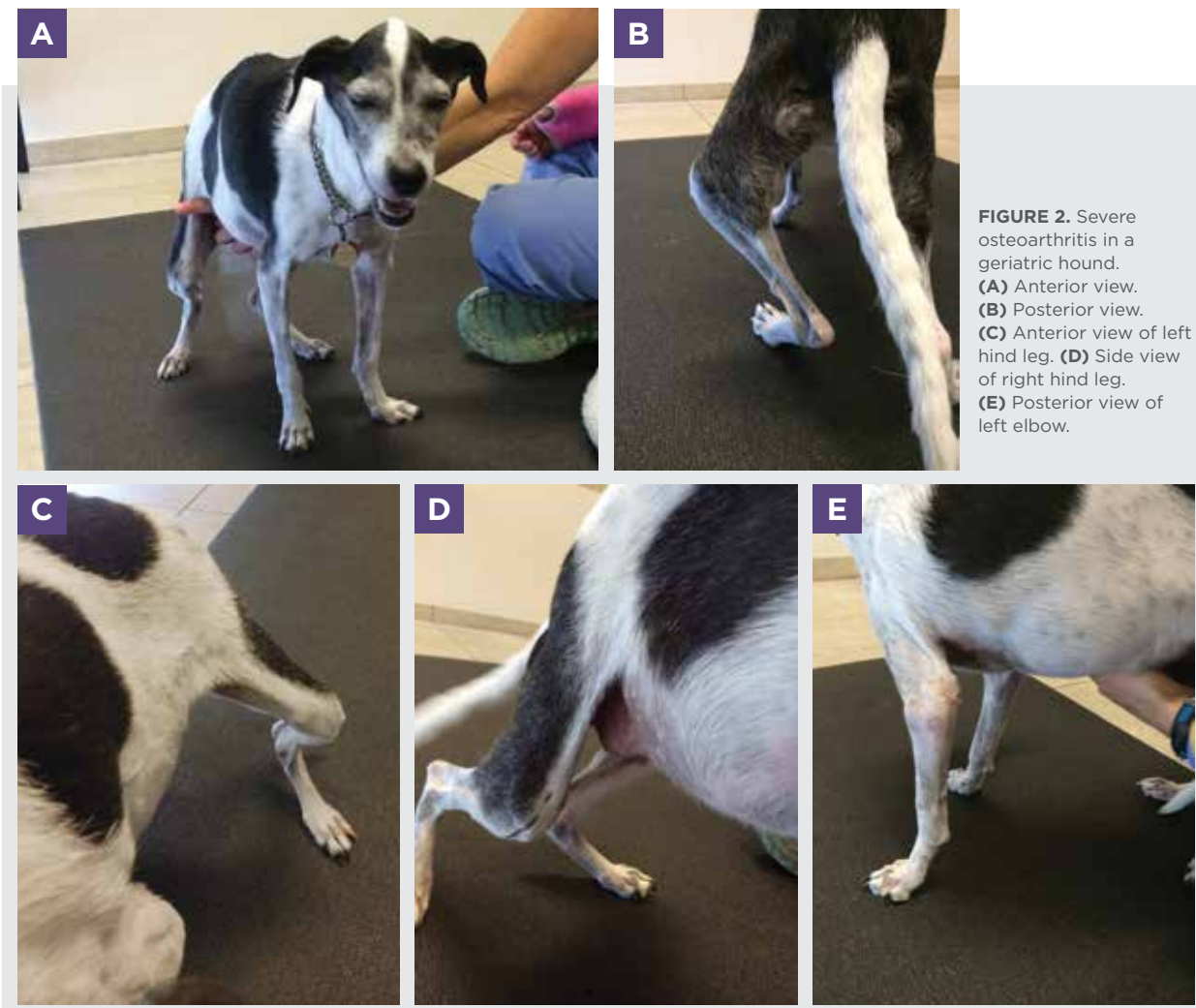


BOX 3

Postural and Behavioral Signs of Pain¹⁵

During wellness or other visits, consider the movement and posture of canine patients. Without alarming the client, note any signs of pain, such as the following, in the record to present to the veterinarian.

1. Reluctance to move
2. Inability to turn in one direction or the other
3. Hind legs tucked under the abdomen
4. Tail between hind legs
5. Ears back
6. Restlessness (e.g., wandering, circling)
7. Rigid posture and gait
8. Sitting or lying in the middle of walks
9. Head hanging; will not lift or turn head
10. Praying position (abdominal pain)
11. Decreased weight bearing (limb pain)
12. Sitting abnormally (e.g., knee out to the side in stifle pain)
13. Trembling or shaking





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and allow it to come to you. Without alarming the client, note any behaviors such as those in **BOX 3** to share with the veterinarian.

- Prioritize what steps for evaluation need to be taken and consult the veterinarian.
- Be sure to instruct the owner in how to use a CMI if they need to take it home with them.
- Tell the owner they can take a video of their dog and send it to you. This may be very helpful, especially if the dog does not act the same at the veterinary hospital.
- Above all, allow the client to voice any concerns they may have.

SUMMARY

The treatment of chronic pain in dogs is an ongoing process. Veterinary nurses play a huge role in the care and assessment provided, including continued learning and leadership. Pain management in veterinary

medicine is a means for personal and professional growth, plus an area of specialization for the veterinary nurse. **TVN**

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Mary Ellen is a graduate of Harcum College and the University of Pennsylvania. Since 1976 she has worked in various aspects of veterinary medicine, including small animal, equine, and mixed practice; zoo animal and laboratory animal medicine; as well as coxidioid research for a pharmaceutical company. She has also worked at Virginia Commonwealth University in the division of animal resources and for research scientists, advising on their choices for anesthesia and pain management protocols. She is currently retired from clinical practice but works as the instructor of anesthesia and pain management at VetMedTeam, LLC. In 2017, Mary Ellen was chosen as NAVTA's Veterinary Technician of the Year. Mary Ellen has written several books and contributed to numerous chapters on anesthesia, pain management, and rehabilitation.

