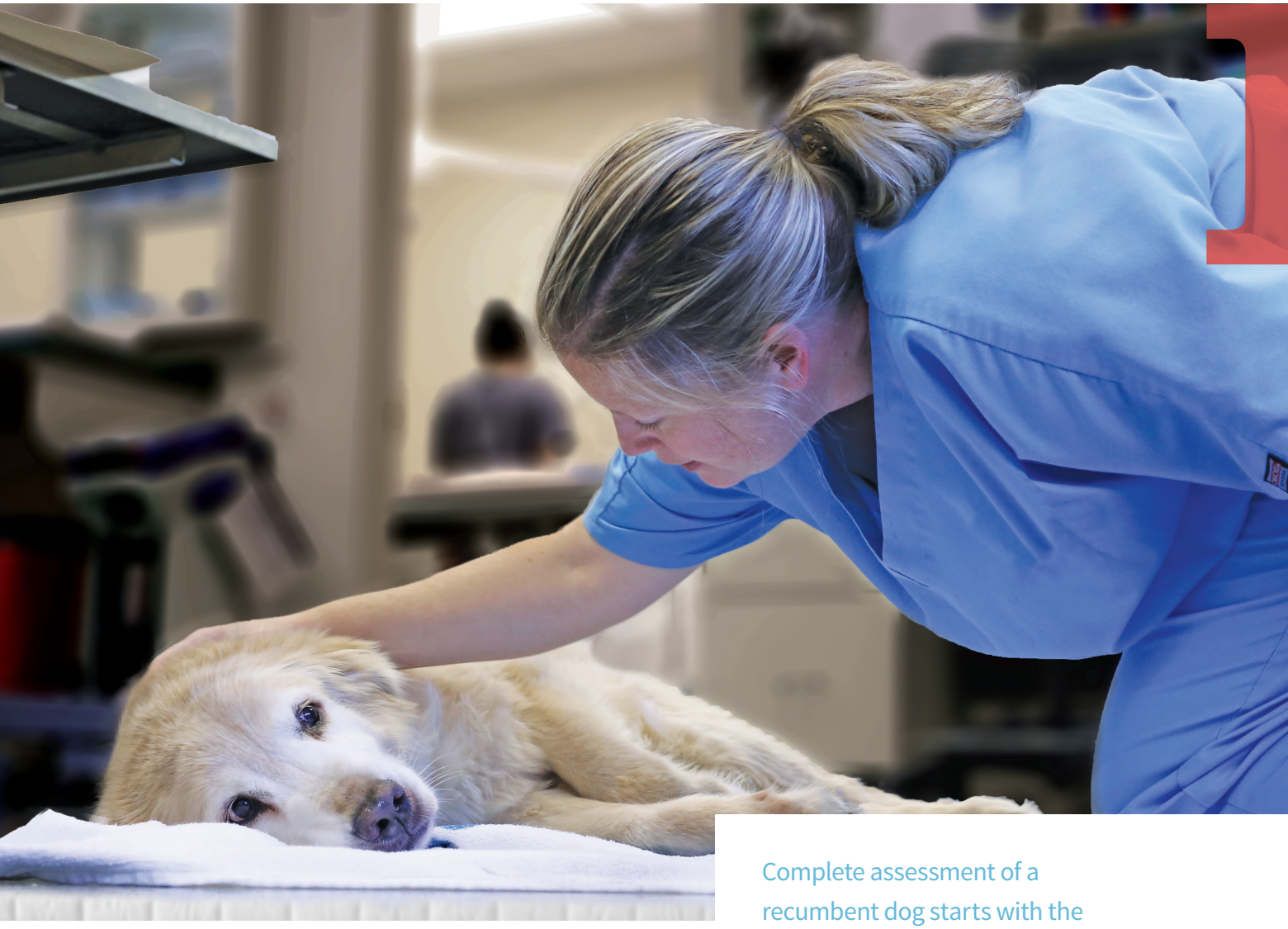

Clinical Assessment of the Recumbent Dog

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Complete assessment of a recumbent dog starts with the client's phone call to the practice. When a client describes a patient as recumbent, or "down," several careful screening questions can help determine the level of urgency and ensure the patient does not develop further injury caused by improper handling and management.

Many problems can cause a recumbent presentation or inability to walk, including:

- Cardiac abnormalities
- General physical illness (metabolic or inflammatory) causing full-body weakness
- Intervertebral disc disease
- Orthopedic disease
- Severe obesity
- Spinal trauma
- Wobbler syndrome (common in large breeds).

Following is a suggested 7-step plan for assessing and treating a recumbent patient.

STEP 1 Phone History

When the client first calls the practice, a well-trained client service representative or veterinary nurse should discuss the patient's inability to walk. If the patient demonstrates obvious signs of pain, advise the client to restrain the patient as needed during transport to minimize the bite risk, and to keep the patient in a quiet, well-padded area. Client service team members and veterinary nurses are key in supporting the client and patient before arrival at the practice. Here are examples of questions that should be asked:

- *Has the patient experienced any known or suspected trauma?*
- *Is the pet in apparent pain or distress?*
- *Is the patient laterally recumbent and, if so, breathing normally?*
- *Are the patient's mucous membranes pink, bright red, or mud-colored?*

STEP 2 Complete Medical History

On patient arrival, the veterinary nurse should obtain a complete medical history to help identify the potential cause of the nonambulatory state. A full history, including general day-to-day care, incident reporting, vaccination status, nutrition, and activity, is necessary. Many modules are available online to support full history-taking (eg, **brief.vet/patient-history**).

Communication among the entire team and the client is key. The client must share details of the events that led to the recumbent status to avoid a presumptive diagnosis. The extra time taken to obtain a careful summary may affect the case's success.

STEP 3 Complete Physical & Neurologic Examinations

Physical and neurologic evaluations, when performed methodically, can help define and localize a lesion, determine if cardiovascular function is normal, assess body condition scoring, and assess for external parasites (eg, ticks causing paralysis) or trauma.

A full neurologic evaluation can also help determine the patient's ability to respond to touch and other stimuli. Spending an appropriate amount of time on this evaluation with the client present allows him or her to ask questions and to feel part of the team, which leads to fewer concerns about noncompliance and miscommunication.[1] In many cases, some of the top differentials for the patient's recumbency can be explored and discussed during this examination period to gauge the client's financial needs and ability to care for a recumbent dog.

Steps for Assessing & Treating a Recumbent Patient

1. Phone History
2. Complete Medical History
3. Complete Physical & Neurologic Examinations
4. Minimum Database
5. Imaging
6. Communication Plan
7. Nursing Protocol.

Communication among the entire team and the client is key.

STEP 4 Minimum Database

All recumbent dogs should be evaluated with a minimum database (ie, CBC, serum chemistry panel, urinalysis) to assess general health.

Based on the physical and neurologic evaluations and laboratory findings, additional testing may be required. For example, an anemic patient who is too weak to rise will need more evaluation related to the cause of the anemia (eg, clotting time, abdominal ultrasound), whereas a neurologically recumbent dog will need the lesion to be localized and further imaging.

STEP 5 Imaging

Breed, age, and weight can support some of the top differentials for a recumbent patient; however, for example, do not assume that a nonambulatory dachshund has intervertebral disc disease. Some of the most common neurologic differentials include:

- Intervertebral disc disease (mostly seen in chondrodystrophoid breeds [eg, Bassett hounds, dachshunds])
- Wobbler syndrome (large-breed dogs [eg, Doberman pinschers, Great Danes])
- Atlantoaxial subluxation (toy breeds [eg, Maltese, Chihuahuas]).

If trauma is a concern, survey spinal radiographs may be the initial diagnostic choice. If neoplasia is higher on the list of differentials, chest radiographs and abdominal ultrasound are often the next steps. Advanced imaging (eg, magnetic resonance imaging, computed tomography, myelogram) typically will follow the base evaluation, depending on access to such imaging and the client's financial position. Additional diagnostics may require sedation or anesthesia. Full-team understanding and discussion are essential.

STEP 6 Communication Plan

Success often rests on careful planning of the team's communication needs. Keeping the client service team informed of the patient's status,

Resources

- *A Practical Guide to Canine and Feline Neurology.* Dewey CW, ed. 2nd ed. Oxford, UK: Wiley-Blackwell; 2008.
- *BSAVA Manual of Canine and Feline Advanced Veterinary Nursing.* Moore AH, Rudd S, eds. 2nd ed. Quedgeley, UK: British Small Animal Veterinary Association; 2008.
- *BSAVA Manual of Canine and Feline Neurology.* Platt SR, Olby NJ, eds. 3rd ed. Quedgeley, UK: British Small Animal Veterinary Association; 2004.
- *BSAVA Manual of Canine and Feline Rehabilitation, Supportive and Pallative Care: Case Studies in Patient Management.* Watson P, Lindley S, eds. Oxford, UK: Wiley-Blackwell; 2011.
- *Canine Rehabilitation and Physical Therapy.* Millis D, Levine D, Taylor R, eds. Philadelphia, PA: Saunders; 2004.
- *Clinical Syndromes in Veterinary Neurology.* Braund KG, ed. 2nd ed. St. Louis, MO: Mosby-Elsevier; 1994.
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even through computer updates, allows all involved in the chain of care to support the client and may prevent costly miscommunication.

Additionally, clients who are well-informed about the tests completed, the case's progression, and the expenses to date are likely to be satisfied with the care. A strong team plans for and executes communication practices throughout the patient's management. For some difficult cases and cases with potentially poor outcomes, strong communication has resulted in a positive experience for the patient, client, and team.[2]

STEP 7 Nursing Protocol

All patients will need monitoring of basic vital signs, turning from side to side if they cannot do so themselves, passive-range-of-motion exercises, physical rehabilitation, and rigorous nursing care to prevent development of secondary problems associated with recumbency (eg, issues related to urine and fecal incontinence, pressure or decubital ulcer development from improper padding and rotation, respiratory complications if unable to maintain sternal recumbency).[3]

Management of the recumbent patient requires a full-team approach, including educating the owner, to prevent and minimize concerns. In the author's experience, such management is often critical and can shorten the patient's recovery time if managed well. On the other hand, poor management can increase the recovery time because the patient may develop secondary complications, as listed above.

Conclusion

As a veterinary nurse taking part in the management of hundreds of recumbent patients, astute observation, carefully developed patient care plans, team communication and coordination, and diligence in management until the patient can be independent again are the keys to a successful outcome. Some of the most profound and powerful experiences as a neurology nurse have occurred when patients were

- *Neurologic Examination of the Dog with Clinicopathologic Observations*. McGrath JT, ed. 2nd ed. Philadelphia, PA: Lea & Febiger; 1960.
- *Neurology for the Small Animal Practitioner (Made Easy Series)*. Chrisman C, Mariani C, Platt S, Clemmons R, eds. 1st ed. Jackson, WY: Teton NewMedia; 2002.
- Neuromuscular Diseases. Shelton D, ed. In: *The Veterinary Clinics of North America: Small Animal Practice.* Philadelphia, PA: WB Saunders; 32(1);2002.
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- *Small Animal Neurological Emergencies*. Platt S, Garosi L, eds. London, UK: Manson Publishing; 2012.
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- *Small Animal Spinal Disorders: Diagnosis and Surgery*. Sharp NJH, Wheeler SJ, eds. 2nd ed. St. Louis, MO: Elsevier-Mosby; 2005.
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recumbent for long periods of time but managed well, and they eventually walked out through the practice doors with their owners. The veterinary nurse's actions, as part of the entire veterinary team, can make the difference for these patients and clients.

References

1. *BSAVA Manual of Canine and Feline Advanced Veterinary Nursing.* Moore AH, Rudd S, eds. 2nd ed. Quedgeley, UK: British Small Animal Veterinary Association; 2008.
2. *BSAVA Manual of Canine and Feline Neurology*. Platt SR, Olby NJ, eds. 3rd ed. Quedgeley, UK: British Small Animal Veterinary Association; 2004.
3. *BSAVA Manual of Canine and Feline Rehabilitation, Supportive and Palliative Care: Case Studies in Patient Management*. Watson P, Lindley S. Oxford, UK: Wiley-Blackwell; 2011.

Veterinarians: Brush up on your neurologic examination technique when preparing to evaluate a recumbent dog.

Management Team: Clients who are well-informed are likely to be satisfied with their pet's care; be sure your practice has a strong communication plan in place for the entire team.

Nursing Team: Care for the recumbent patient should not focus solely on comfort—take the necessary measures to avoid complications related to incontinence, ulcers, respiratory complications, and other challenges associated with low mobility.

Client Care Team: Clients with recumbent patients may call about the status of the case; even if you are already busy and backed up, remember to be welcoming and to help the client as best as you can.