TEACHING TARGET

ALL VETERINARY TEAM MEMBERS SHOULD RECEIVE SPECIALIZED TRAINING IN HOSPICE AND PALLIATIVE CARE AND BE ABLE TO PROVIDE SOCIAL AND PSYCHOLOGICAL SUPPORT TO PATIENTS AND CLIENTS.

Hospice Care & Palliative Sedation

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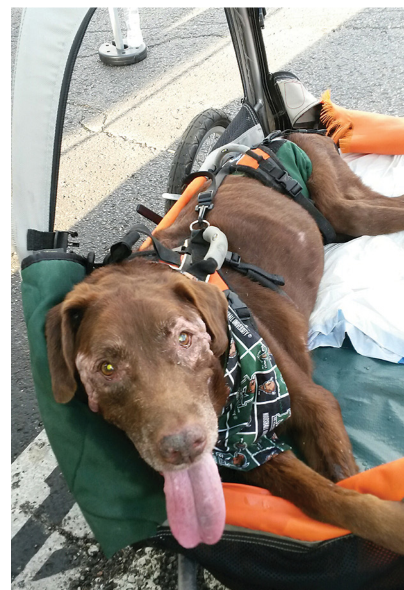
Clients are requesting hospice and palliative care for terminally ill patients more frequently. Identifying specific treatment goals, making a care plan that meets patient and client needs, and maintaining open communication are the cornerstones of care.

Case Summary

TJ, a 13-year-old neutered Labrador retriever, presented for consultation with the hospice and palliative care service for hyporexia and breathing difficulty. He had a history of osteoarthritis, hypothyroidism, and discoid lupus erythematosus, and had been diagnosed 22 months earlier with progressive, degenerative, peripheral neuropathy and multifocal myelopathy. Over the last few months, he had received treatment for multiple bouts of aspiration pneumonia associated with dysphagia. He had a 6-month history of tetraplegia and was taken outside daily in a stroller to accompany his ambulatory housemates. He also had urinary and fecal incontinence.

The client, a physician, had been caring for TJ at home under veterinary guidance, administering multiple oral medications and performing pulsed magnetic therapy twice daily. (See **Table 1**, page 36.)

TJ's diet consisted of any food he would eat, including canned food in meatballs, slurries, dry kibble, and various people foods of different textures to improve his dysphagia. None made any significant impact on his dysphagia. He used a Bailey chair for meals. His incontinence was managed with manual evacuation and disposable bed diapers.



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▲ **FIGURE 1** TJ, whose owner took him outside every day in a stroller, received hospice and palliative care before he died of end-stage peripheral neuropathy.

Diagnosis

TJ was examined by the neurology service before the hospice and palliative care team consultation. A serum chemistry profile and CBC showed no significant abnormalities. Thoracic radiographs showed aspiration pneumonia and generalized atelectasis. A cardiac evaluation, prompted by an arrhythmia and murmur heard on auscultation, identified a sinus rhythm with premature ventricular complexes that did not warrant medication.

On physical examination with the hospice and palliative care team, TJ weighed 24.3 kg; his body condition was 2/5; he was bright, alert, and responsive; and his temperature, pulse, and respiratory rate were within normal limits. His breathing was labored with intermittent, slow, purposeful breaths and he exhibited lip-blowing behavior. His mucous membranes were pink and dry.

Auscultation disclosed soft crackles that were loudest over the right middle lung lobe. A grade III/VI left apical systolic murmur with regular premature beats and subsequent pauses, with a synchronous pulse, was noted. Abdominal palpation revealed no abnormalities. Generalized sarcopenia and tetraparesis were noted, and healed decubitus ulcers were present over the ischium bilaterally.

TJ's history and clinical signs suggested end-stage peripheral neuropathy. His increased respiratory effort was likely caused by diaphragmatic denervation exacerbated by pneumonia.

TABLE 1 The Patient's Daily Medication Regimen at Initial Evaluation by the Hospice & Palliative Care Service

Medication	Dosage
Prednisone	10 mg PO q24h
Levothyroxine	0.6 mg PO q12h
Enrofloxacin	136 mg q24h
Metronidazole	250 mg PRN
Tramadol	50 mg PO q12h
Omeprazole	20 mg q12h
Carafate	1-g slurry PO q8-12h, 1 hour before meals/medications
Metoclopramide	10 mg q12h
T-relief tablets	1-2 tablets q8h

Treatment

The patient's current medical treatment plan and the new findings were reviewed with the client, and it was determined the goals of care would focus on enriching TJ's life, promoting analgesia and relief of clinical signs, and ensuring all options for relief were exhausted while maintaining TJ's dignity and pain control.

The client was opposed to euthanasia but agreed with palliated natural death. The client also believed the dog's quality of life (QOL) revolved around their interactions and daily interactions with the 2 other dogs in the home, which were preserved. No medications were added to his current treatment regimen (see **Table 1**), despite the presence of pneumonia, because he had a history of recurrent pneumonia and was already receiving several antibiotics and other agents to help make him comfortable.

Home oxygen therapy was initiated to help him breathe more easily and reduce his respiratory discomfort. Nasal cannulas were placed and a prescription was dispensed for a home oxygen condenser with tubing. Additional analgesia was provided by increasing tramadol from q12h to q6h and adding gabapentin q8-12h as needed.

The client believed she saw improvement when administering tramadol. Since this 2014 case, research has disclosed tramadol is an ineffective analgesic in dogs because of the lack of metabolite[1]; the benefit the client noted was possibly from the drug's sedating effect. Because this patient's condition was neurodegenerative, the reason for increased analgesia was the presumed osteoarthritis with a lack of mobility. The course of steroids prevented use of NSAIDs.

Gabapentin's mechanism of action has not yet been fully elucidated, although literature supports its role in neuropathic pain. TJ was given gabapentin only as needed because of his dysphagia and the number of oral medications already being administered. The client declined other options (eg, a transdermal fentanyl patch) that were discussed.

Although hyporexia is normal in a patient close to death, the client requested TJ be given an appetite stimulant. The veterinarian prescribed mirtazapine and recommended adding thickening agents (eg, Original Thick-It Thickener, Kent Precision Foods Group) to his drinking water to aid in bolus control and minimize his aspiration risk. The veterinarian also recommended the continued use of bed diapers and baby wipes, dry shampoo to keep the hair and skin clean following urination and defecation, and silver sulfadiazine cream to treat the skin over his ischium. Changing the position of TJ's chest and pelvis q2-4h was added to the passive range of motion exercises the client was already performing, and a donut pillow was recommended to prevent decubitus ulcers.

Outcome

TJ was tachypneic following oxygen institution but had improved comfort when the veterinarian examined him at home 24 hours after discharge. He had anorexia despite the mirtazapine, which was discontinued.

Over the next 7 days, TJ's mentation became progressively dull and his increased respiratory effort continued despite increased oxygen support. After examination, the veterinarian instituted palliative sedation (ie, intranasal midazolam) to alleviate anxiety and air hunger. The client, on the veterinarian's recommendation, gave TJ a second dose 6 hours later because his anxiety and dyspnea were reduced after the initial dose. TJ died peacefully 12 hours after sedation was commenced.

The client was opposed to euthanasia but agreed with palliated natural death.

Team Education

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In veterinary hospice, the goals of care include managing clinical signs, promoting patient comfort, and preserving or improving QOL—not attempting to cure the patient. The veterinary team collaborates with the client to provide a dynamic care plan for the patient, including an emergency plan (eg, sedation, as used for TJ) should the patient's signs suddenly worsen. The team also educates the client about end-of-life events, bereavement, and aftercare.[2,3]

Managing the patient's pain and clinical signs is most important when providing hospice and palliative care and all veterinary team members should have specialized training in this area.[4-6] One training option is the certification program in interdisciplinary pain management offered by the International Veterinary Academy for Pain Management.[7]

Team members should be knowledgeable about species-specific pain scales, the expected course and signs of specific disease states,[8,9] and the psychological and social aspects of patient well-being; for example, terminally ill patients may experience mental states such as depression, loneliness, and anxiety.[10] Although clients are generally adept at recognizing their pet's overt signs of pain and distress, they often cannot identify subtle behavior changes (eg, withdrawal from affection, unusual aggression, yawning) that may indicate physical or mental suffering. Team members should be able to help clients recognize these subtle signs of discomfort.

Quality of Life Concept[27]

In human medicine, quality of life (QOL) refers to a subjective judgment made by a patient about how well or poorly he or she is coping with illness or disability.

In veterinary medicine, because animals cannot say how they are feeling, veterinary professionals rely on close behavior observation and empathic interpretation, taking into account the individual animal's personality and preferences as much as they are known.

QOL assessments can be a useful tool in end-of-life care because they encourage caregivers to reflect on how their pet's physical, emotional, and social well-being is affected by disease, disability, or age-related changes.

Assessing Quality of Life

The veterinary team should also be familiar with the QOL concept and know how to assess—and help clients assess—a patient's physical and mental well-being. (See **Quality of Life Concept**.) Simple online QOL assessment tools can be used as part of the hospice care toolbox, but they should serve as supplemental guides only.[11-23] (See **Resources**.)

Eliciting Goals of Care

Treatment options involving hospice and palliative care, best described as *treatments to maintain quality of life* or *treatments to manage pain and discomfort*, must be presented to clients with a terminally ill pet. Team members should always listen to clients, eliciting and helping them articulate their goals for their pet. Questions can include:

- *What activities does the patient enjoy?*
- *What social bonds does the patient have with family members, both human and animal?*
- *Will the social bonds remain in the face of illness?*

Painful, prolonged illness or disability can alter a patient's personality, cause behavior changes, change the way he or she interacts with family, and strain family relationships, so team members should help caregivers

recognize their pet is struggling to adapt, not misbehaving.

Providing Client Support

The veterinary team must know how to provide critical social and psychological support to grieving clients and be sensitive to situations in which contacting mental health experts is appropriate. End-of-life care involves much more than medical treatments, and establishing an interdisciplinary network of support for patients (eg, physical therapy, acupuncture, massage) and clients (eg, grief counselors, spiritual advisors, volunteers or family members who can provide respite care, aftercare providers) is a valuable service.

Empathy for clients and patients is an essential element of all veterinary interactions but especially when providing end-of-life care.[24] Clients facing the decline and loss of a beloved family pet may experience anxiety, confusion, grief, and feelings of loss when deciding on the best care, including whether or when to end the patient's life. Choosing palliated natural death or euthanasia for their pet likely will be one of their most painful decisions, but a well-trained veterinary team can affirm a client's complex feelings and provide a collaborative decision-making process that helps him or her feel supported but not pressured.[25]

Making end-of-life decisions for terminally ill patients is an emotional process, and the veterinary team must take great care to help clients form a plan they are comfortable with that is in the patient's best interests. Research suggests people are more likely to regret rushed decisions, so clients should be given adequate time to process information.[26] Clients who feel hurried or coerced into euthanizing their pet may suffer prolonged and unresolved grief.

Differences of opinion are inevitable in end-of-life care. Clients who choose hospice care and/or palliated natural death for their pet are often strongly committed and base their decisions on well-considered moral or religious reasons[27] and must never feel judged. However, if any veterinary team member is uncomfortable with a client's choices, raising concerns openly and empathically is appropriate.

Euthanasia vs Palliative Sedation[27]

As in human medicine, a fine line exists in veterinary medicine between euthanasia and palliative sedation. The difference in moral intent is often crucial, even though the outcome is the same.

EUTHANASIA

- Performed with the intent of bringing about the patient's death

PALLIATIVE SEDATION

- Directed at keeping the patient's discomfort at tolerable levels
- May decrease a patient's respiratory drive, contributing to death, but is not administered as a life-ending intervention

Resources

- 2015 AAHA Pain Management Guidelines for Dogs & Cats. **aaha.org/professional/resources/pain_management.aspx**
- AVMA Guidelines for Veterinary Hospice Care. **avma.org/KB/Policies/Pages/Guidelines-for-veterinary-hospice-care.aspx**
- International Association for Animal Hospice & Palliative Care. **iaahpc.org**
- International Veterinary Academy of Pain Management. **ivapm.org**
- Veterinary Society for Hospice and Palliative Care. **vethospicesociety.org/position-statements**

Conclusion

Veterinarians in the United States have a long-standing preference for euthanasia over natural death,[27] based primarily on their lack of knowledge about palliated, or hospice-assisted, natural death, and their belief that natural death involves "letting an animal die" with no medical intervention.[27] Unassisted dying can cause profound suffering, whereas palliated natural death gives a patient a high level of care that focuses on pain control, relief of clinical signs, and pleasurable experiences. (See **Euthanasia vs Palliative Sedation**, page 39.)

In TJ's case, the veterinary team worked with the client to keep him as comfortable as possible, and he had good quality of life until his final week. Palliative sedation is a reasonable option for patients when clients or veterinarians have moral objections to euthanasia and was appropriate for TJ.

TEAM TAKEAWAYS

Veterinarians: Making end-of-life decisions for terminally ill patients is an emotional process for the veterinary team and clients, so take great care to explain all the options to team members so they can help clients make decisions that make them feel comfortable and not judged.

Nursing Team: Veterinary nurses can perhaps help most by listening carefully and helping clients articulate goals based on their responses to questions about what constitutes quality of life for the patient and the social bonds the patient has with the family.

Client Care Team: Establishing an end-of-life support network is a valuable client service. Help clients by providing a list of grief counselors and other support resources available locally and online.

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