Advancing Veterinary Pain Management into a New Era

chapter 1

Patricia R. Zehna

The July 15, 2002, issue of the *Journal of the American Veterinary Medical Association* published an article authored by Benjamin Howard, MD, MPH, regarding the course of a human neonate pain management case. It was a call for pain management for those who have no voice and pointed out not only the medical but also the ethical reasons that we must ensure appropriate pain management for our patients.

A landmark case that established greater pain management practices took place in 1985. Jeffery Lawson, a 1-lb, 11-oz neonate, was operated on to correct patent ductus arteriosus and did not receive anesthesia for his operation (Lawson 1986). When he died a month later, his mother reviewed his medical record and discovered this fact. Jeffrey's neonatologist had reassured her at the time of the operation that he would receive anesthesia. She was moved to confront this practice and wrote of his account,

> Jeffrey had holes cut in both sides of his neck, another cut in his right chest, an incision from his breastbone around to his backbone, his ribs pried apart, and an extra artery near his heart tied off. This was topped off with another hole cut in his left side for a chest tube. This operation lasted hours. Jeffrey was awake through it all. The anesthesiologist paralyzed him with a curate drug (pancuronium bromide) that left him unable to move, but totally conscious. When I questioned the anesthesiologist later about the use of this drug, she said that Jeffrey was too sick to tolerate powerful anesthetics. Anyway, she said, it has never been demonstrated that babies feel pain. Her neonatologist described the lack of anesthesia for surgery as based on "ignorance, hubris and barbarism". When her account was published in *The Washington Post* in August 1987, there was a public outcry and other parents spoke of their experiences. The routine practice of administering little to no analgesia for surgery in premature and critically ill infants caught the attention of the public and became a social issue.
>
> (Lee 2002, p. 234)

Pain Management for Veterinary Technicians and Nurses, First Edition. Edited by Mary Ellen Goldberg and Nancy Shaffran.

Companion Website: www.wiley.com/go/goldbergpainmanagement

While this is difficult to read, it is a very good illustration of our responsibility to provide appropriate pain management not only because it is the right thing to do for our patients, both medically and ethically, but also because their owners, our clients, trust us to protect their pets. They expect that we will follow the first axiom of medicine "first do no harm," and they assume that we are making their pets as comfortable as possible.

Each of our perspectives about the current status of pain management will differ due to a number of factors. We are influenced by the branch of medicine in which we chose to practice, the level of medical advancement where we work, the amount of time that we have practiced medicine, and even our own personal experiences with pain and pain management.

We are entering a new era of pain management in veterinary medicine and face the obstacles that go along with introducing new concepts. Many of the obstacles that we face are common to the human side of medicine; therefore, our research often overlaps.

The International Association for the Study of Pain defines pain as "An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage. The inability to communicate verbally does not negate the possibility that an individual is experiencing pain and is in need of appropriate pain-relieving treatment" (IASP 1994). In 1999, the Veteran's Administration declared "war" on pain by making it their fifth vital sign (Flaherty 2001). Since this time, veterinary organizations have tried to adopt pain as the fourth vital sign.

Several organizations have published "guidelines" for pain management in veterinary patients:

- The American College of Veterinary Anesthesiologists' position paper on the treatment of pain in animals (http://www.acva.org/docs/Pain_Treatment).
- AAHA/AAFP Pain Management Guidelines for Dogs & Cats (https://www.aahanet.org/Library/PainMgmt.aspx).
- International Veterinary Academy of Pain Management (IVAPM) has several position statement papers that are being prepared for peer review (www.ivapm.org).

We need to be aware of what is contained in each document so we can share ideas with our colleagues about how to implement this advice.

Although there have been many advances in human medicine, this excerpt from a 10-year-old medical journal is revealing about the pace at which medical professionals feel change is actually taking place.

"The evidence that physicians and nurses do not treat pain adequately began to appear in the medical literature nearly 30 years ago. In the following decades, the accumulated data showed that many types of pain- acute pain, cancer pain, and chronic nonmalignant pain- were being undertreated. The reasons offered for under-treatment usually characterized as 'barriers' to effective pain relief, were remarkably consistent across the literature. Despite numerous calls to educate health care professionals about pain management, only the rhetoric has expanded (Rich 2001, pp. 151–152)".

Overcoming the Obstacles to Pain Management

There are many obstacles to effective pain assessment and administration. Some of these exist with good reason, and some are outdated ideas, habits, or lack of education. Veterinary technicians must have a good working knowledge of these obstacles so they can overcome them and advocate for their patients. We carry the responsibility to impart this knowledge to other hospital team members and provide accurate client education. As an educator and patient advocate, the technician is the solution to breaking down the barriers to effective pain management and raising awareness on behalf of their patients.

Veterinary technicians/nurses play an integral role in overcoming obstacles to pain management.

An often referenced 1998 Canadian study revealed that veterinary practices that have trained veterinary technicians on staff practice better pain management. The quality of pain management in fact increased proportionately with the number of licensed technicians on staff and relative to the amount of continuing education (CE) the technicians received (Dohoo and Dohoo 1998).

Examining common obstacles is a good start in developing programs with which to educate our colleagues and clients.

Common Obstacles

- Inadequate knowledge of pain mechanisms and pain management options
- Difficulty with pain assessment
  - Pets mask pain
  - Wide variation between breeds and species
  - Objective tools are not available
- Fears about analgesic side effects and how to manage them
- Failure to make pain assessment and management a priority for every patient
  - Poor communication between staff members
  - Lack of a systematic and collaborative approach to pain assessment and management
  - Lack of consistent pain management protocols
  - Absence of accountability for pain management
- Client-related issues
  - Failure to recognize pain signs
  - Difficulty administering medications
  - Cost of pain medications and/or other treatment modalities

Knowledge

The technician/nurse can help identify specific ways in which to help facilitate the practice in overcoming these obstacles. Each member of the team should have not only a clearly defined role within the pain management team but also be given the knowledge with which to effectively carry out their role.

Pain mechanisms and pain management options can be better understood through required study of materials provided by the hospital. This can begin as part of an orientation and continue with on-the-job training and CE.

Each practice should have at least one technician who is assigned to oversee pain management education and ensure the hospital remains current with new research and recommendations.

The functions of the pain management technician/nurse should include:

- Providing CE opportunities on a regular basis either in house or utilizing other resources such as online CE, veterinary conferences, and local professional meetings.
- Hands-on training in pain recognition/differentiation including the use of pain scales and scoring systems.
- Leading the team in the research of pain management topics and techniques in order to keep the practice current and have scientific data available to support requests for pain management to the veterinarian(s).
- Acting as a liaison, meeting regularly with the veterinarian(s) in order to form a collaborative effort between the veterinarian(s) who carries the ultimate responsibility for pain management decisions and the support staff who provide frontline nursing care and therefore are usually the first to note changes in patient status. This will help the veterinarian(s) to make decisions regarding staff and their specific roles in regard to pain management decisions.
- Developing pain management protocols with the veterinarian(s) approval and systems of accountability for pain management and record keeping.

Larger hospitals may benefit from a pain team with several individuals (veterinarians and technicians)

who partner to bring pain management to all patients in the practice. (See last section on forming a pain team.)

Assessment

Pain can be difficult to assess and differentiate from dysphoria or behavioral problems. Species and breeds within the same species also express pain differently. This is easily demonstrated by differences between the reactions to pain of northern breeds such as Siberian Huskies, who are very vocal, compared to sporting breeds such as Labradors, who are generally more stoic. Much of this knowledge is learned with experience but can be passed to less experienced team members as well.

Pain scales as an assessment tool will be addressed in Chapter 3.

Each physical examination should include a pain assessment and possible pain management recommendations as part of each patient's treatment plan. A system of accountability whereby this can be tracked should also be in place to ensure that this is not "falling through the cracks."

Communication

A commonly heard complaint from technicians is that they feel their requests for pain management are not taken seriously by veterinarians. Technicians/nurses need to learn how to request updated analgesia effectively. Instead of "That spay needs more pain management!!!," which doesn't convey any real information about the patient in question, a better approach is to present the request in a logical detailed manner. For example, "Paulina Smith, the yellow Labrador on which you performed an ovariohysterectomy on was extubated 10 minutes ago, is vocalizing and looking back at her incision site. She received the usual amount of postoperative morphine as you were closing, her heart rate is currently 126 beats per minute (bpm), and she seems agitated or anxious. May I administer a microdose of dexmedetomidine IV at our usual dosage or do you have a dosage preference?" The veterinarian is much more likely to be responsive to a request when given a history and the reasons behind it. Another way of gaining trust through communication is to share observations about what protocols worked well or were not effective, with detailed reasons why, in a nonthreatening manner and at an appropriate time. This is a way not only of partnering with colleagues but also learning with them. For example, "I have noticed that when we add a microdose of a narcotic to our dental nerve blocks, they seem to be more effective." "I wonder if we should consider using only bupivacaine instead of half bupivacaine and half lidocaine since a dental extraction and prophylaxis will almost always take longer than a half an hour." This promotes discussion and shows interest beyond a basic job description.

Those who attend CE events, belong to professional groups or simply read journals regularly will often hear about new techniques that might be beneficial to incorporate into the hospital's protocols.

Clients

Clients' obstacles must be handled with care. Time must be taken to teach clients how to administer medications so that the pet is receiving analgesia at the appropriate dose and recommended duration. Client education includes demonstration of at-home rehabilitation techniques. It might sometimes be necessary to find lower-cost options to medication protocols.

Increased understanding of the human/animal bond has drastically changed attitudes toward veterinary medical treatment. Not only are people willing to spend more on their pets, but they have an increased willingness to comply with treatment recommendations in order to keep their pets healthy and comfortable. When clients are asked, "What role does your pet play in your life," nearly 100% of

clients responded, "They are my child" or "They are part of the family."

While this is considered an improvement over old attitudes and in many ways this makes our jobs easier, the emotional attachment that goes along with this bond places added importance on not only how well we do our jobs but also our client's interpretation of whether we are treating their "family" well enough. "Pet owners don't want their pets to suffer, so we rarely encounter resistance to our pain management recommendations," says Robin Downing, DVM, Dipl. AAPM, owner of Windsor Veterinary Clinic and The Downing Center for Animal Pain Management in Windsor, Colorado (Downing 2008). Dr. Downing's practice has a script that technicians use to present the points of each case and also to guide the clients through the next steps of their pets' treatment. The communication feels nonthreatening to the client; therefore, they are more receptive to the information they are receiving. The Downing Center for Animal Pain Management has built a very high practice/client trust level not only through the quality of medicine that is practiced but also the care that is taken with clients.

Start by having honest conversations with clients regarding their lifestyle, expectations, and abilities. This information should become part of the pet's permanent medical record and should include the following:

- Lifestyle—Activity level, work status, layout of home such as stairs or size of yard, small children, other pets, etc.
- Expectations—Particular types of treatment, level of participation, level of improvement anticipated, etc.
- Abilities—Physical, time, financial, etc.

Pain management programs are tailored specifically for each client. While there are virtually no clients who want to see their pets suffer, there are still practical considerations. All clients deserve to know what treatment options are available. Specific client information creates the opportunity to offer assistance programs available through the practice or that exist in the community. For example, if the obstacle is financial, CareCredit or a charitable trust might be discussed. If the obstacle is physical and a pet is going to be immobilized or requires home physical rehabilitation, arrangements can be discussed and made in advance of the surgery/procedure.

Unless pain is traumatic, it's not uncommon for a pet's pain to go unrecognized. Animals have a "pain" language, but they often mask pain and seem to be capable of enduring large amounts of pain with the most subtle signs. It is important for us to share our pain assessment, in a positive way with our clients. Many clients will feel guilty because they didn't notice or thought it was normal behavior or "slowing down." In order to get them on board for treating pain, offering reassurance and support will be the correct way to overcome those obstacles. Pet owners can be taught to recognize obvious and subtle pain signs in their pets.

There is a myriad of information, and misinformation, which is readily available on the Internet, but it is important for the veterinary staff to be the client's trusted resource. Quality client handouts whether generated commercially or from hospital staff are absolutely necessary. Clients don't remember most of what's said in the exam room, especially if they are worried about their pet. It is much better to discuss issues with the client prior to returning their pet. Once the beloved pet arrives, they will "hear" nothing that is said. Specific, detailed instructions will help to keep clients connected to the hospital when treating pets at home.

Along with continuing education, well-thought-out organization and written materials, communication between staff, especially the technician and veterinarian, and the practice and the client is of major importance to providing optimal pain management for veterinary patients.

Forming an In-Hospital Pain Team

Large veterinary facilities and specialty hospitals often have great difficulty designing and enforcing consistent pain management plans. Veterinarians are often divided in their approach, resulting in great variation in pain management and exposing technicians to a wide variety of protocols and patient responses. When this vital information is captured, technicians can play a significant role in designing optimal protocols that are hospital based rather than clinician specific. Formation of an in-hospital pain team can be extremely beneficial in designing effective hospital protocols and providing continuity of care for all patients (N. Shaffran, pers. comm.).

Getting Started

How to create the team

1. Get endorsement hospital wide establishing the pain team's authority to make recommendations and offer treatment options for all painful animals.
2. Decide who should be on the team, how many members, and who the leader will be. The team should include technicians/nurses and veterinarians from various hospital sections and shifts.
3. Plan regular organized meetings for the pain team. Regularly have the pain team address the hospital staff with new information.

Specific Pain Team Tasks

1. Review existing protocols, including preemptive, perioperative, and take-home analgesia.
2. Set new protocols for assessment and treatment. The initial approach should be based on the following questions:
    - How painful is the condition, procedure, or surgery expected to be?
    - Are there any underlying factors such as stress, anxiety, fear, or preexisting chronic pain conditions that could be causing an increased pain response?
    - What is the normal behavior/disposition of the particular breed/species and for this animal in particular?
    - Are there any contraindications to particular drugs or drug classes for this patient's condition?
    - Does this animal have a history of drug sensitivities? Consider interviewing the owner regarding the animal's previous response to analgesia at home.
    - Are there nonpharmacologic approaches that can be taken (i.e., massage, passive range of motion, physical therapy, hydrotherapy, acupuncture)?

Protocol changes may include adjustments in analgesic regimes (e.g., PRN injections to a constant rate infusion), changes or additions to drug protocols (e.g., adding an NSAID), or the possible addition of sedatives if needed.

3. Order new drugs or equipment as needed.
4. Set a regular cage-side rounds protocol/frequency to ensure exchange of information between shifts and establish continuity of care.
5. Solicit feedback from and communicate goals regularly to all hospital members.
6. Provide careful documentation of analgesic type, dose, frequency, and, most importantly, response throughout the treatment period.
7. Stay current (monitoring the IVAPM, CE, journal clubs, etc.).

Conclusion

Effective pain management requires ongoing diligence on the part of the veterinary hospital. Reaching the goal of consistent pain management is best achieved when the entire healthcare team including veterinarians, veterinary technicians/

nurses, assistants, and pet owners communicate in an effective manner. Owners need to be educated about how to assess their pet's pain status. Dialogue continues concerning obstacles to pain management. The technician/veterinarian relationship continues to progress; it is trust based and built over time, through positive experiences and open communication. The best-case scenario is one where the veterinarian grows to consider the technician an integral player in the pain management team. The recognition and treatment of pain in veterinary medicine has advanced exponentially in a relatively short amount of time. The "new era" has begun, pain standards have been adopted by important veterinary organizations, pain is considered a vital sign, pain scales are a well-known tool, and pain management lectures are overflowing at meetings. Albert Einstein said, "We can't solve problems by using the same thinking we used when we created them," and thinking/attitudes have drastically changed in the area of pain management. "Pain is a message asking for our help" (Epstein 2008). The veterinary technician/nurse should make it their mission to provide that help.

References

Dohoo, S.E. & Dohoo, I.R. (1998) Attitudes and concerns of Canadian animal health technologists toward positive perioperative pain management in dogs and cats. *Canadian Veterinary Journal*, **39** (8), 491–496.

Downing, R. (2008) Sample script: How to discuss chronic pain management. *Firstline*, **4** (4), 1.

Epstein, G. (2008) *Kabbalah for Inner Peace*, Acmi Press, New York, p. 72.

Flaherty, J.H. (2001) Who's taking your 5th vital sign? *Journal of Gerontology: Medical Sciences*, **56A** (7), M397–M399.

IASP (1994) *IASP Task Force on Taxonomy*, H. Merskey and N. Bogduk (eds), IASP Press, Seattle.

Lawson, J. (1986) *Letter*, vol. 9. Perinatal Press, pp. 141–142.

Lee, B.H. (2002) Managing pain in human neonates applications for animals. *Journal of the American Veterinary Medical Association*, **221** (2), 234.

Rich, B.A. (2001) Physicians legal duty to relieve suffering. *Western Journal of Medicine*, **175** (3), 151–152.