The Veterinary Technician’s Essential Role in Pain Management
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THE PAIN TEAM

Effective approach to optimum pain management in a large veterinary facility

You may need a pain team

The goal of providing the best pain management protocols for the individual small animal patients is achieved when working together as a team. Effective communication between all members of the entire health care team including veterinarians, veterinary technician/nurses, assistants and pet owners is essential for consistent pain management.

Client perception and demand has required that veterinarians be proactive about pain management. In addition, new AAHA regulations indicate that regular pain assessment of the patient needs to be performed and recorded in the medical record. Pain control in veterinary medicine is now the standard of care and should not be considered an optional treatment. Studies have shown that untreated pain is detrimental to the body and causes excessive sympathetic nervous system stimulation, immune suppression, and even has been attributed to causing death. Preemptive analgesia is the concept of giving pain medication prior to inflicting pain (e.g. a surgical incision). Without preemptive analgesia, the pain pathways become hypersensitized and postoperative pain is frequently more difficult to control (known as wind-up phenomenon). Alternatively, when preemptive analgesia is instituted, it has been shown that postoperative pain is less severe, easier to control, and return to function is frequently quicker.

Large veterinary facilities and specialty hospitals often have great difficulty designing and enforcing good pain management plans. Veterinarians are often divided in their approach necessitating technicians learn a large variety protocol. Unfortunately this often results in some patients getting optimum care while others remain unnecessarily painful or stressed. Technicians play a huge role in determining which protocols are most effective and when this vital information is captured and reported the pain team gets good direction.

Technician’s role

Until we have a better standard for assessing pain, there will remain a lot of subjective assessments of pain in animals. This ultimately can lead to controversy, especially between veterinarians and technicians. It is likely that the technician, who tends to provide the hour to hour care of the patient, is truly more attuned to the pain status of an animal than the veterinarian who only sees the patient intermittently throughout the day. It is for this reason that is crucial that veterinary technicians have the necessary skills to properly assess pain in animals.

Knowledge of the physiology of pain and pharmacology of analgesics is essential for good communication between veterinarians and veterinary technicians. Optimally, the veterinarian regards the technician as an integral member of the pain management team. The skilled technician is a source of vital information required to choose and administer appropriate analgesics. He/she is a trusted caretaker for recovering patients. In tandem, the veterinarian must be seen as approachable and responsive. The success of this relationship is terribly important for all hospitalized patients and applies to elective, routine and extraordinary cases.

The critical care setting may best demonstrate the crucial role veterinary technicians play in providing optimum patient care. Because the concentrated interactive nature of the nurse/patient relationship is coupled with severely diminished communication skills of the critically ill patient; nowhere more than in the ICU is this responsibility more apparent. Technicians in the ICU observe patients very closely for extended periods of time and are usually the first to notice changes in status. Familiarity with patient personalities and reactions to stimuli gives additional insight. This experience establishes expectations of how particular patients may react to painful stimuli. This includes the differences in expression between dogs and cats, the young and old and variations among certain breeds. For example Siberian Huskies and Dobermans who vocalize regularly are thought to be more “sensitive” to pain, or possess a lower pain threshold than other breeds whereas Pit Bulls and Labrador Retrievers appear to remain very stoical in the face of pain. In addition, cats manifest pain in very
different ways than dogs, so these differences should be acknowledged and recognized. The skilled technician factors this in to his/her pain assessments. Goals of the technician’s role in the pain team include:

- Patient assessment
- Providing non-pharmacological comfort and care
- Differentiating pain from other stress
- Requesting appropriate analgesia/sedation
- Administering medications, performing analgesic techniques
- Monitoring and treating drug effects
- Assessing patients post-operatively
- Communicating with clients
- Logging controlled substances

**Measuring need for treatment and results**

All patients should be evaluated for painfulness on admission and regular intervals throughout the hospitalization period. Pain signs may be obvious and include increased heart rate and blood pressure, increased respiratory rate, and vocalization. The more subtle behavioral changes that occur such as general restlessness, decreased appetite, not sleeping, resenting handling, and not assuming a normal position in their cage may be even more significant.

There are many pain scoring systems available, from simple to complex. The most important system to choose is one that is relatively straight-forward to use, one that is fairly consistent between multiple users, and that is not overly cumbersome. If there is question or controversy regarding an animal’s pain status, then a more involved pain scale can be used in those situations. There are 3 main categories of pain scoring systems: pre-emptive, subjective, and objective.

Pre-emptive scoring is a means of “predicting” the pain a particular procedure may induce based upon the perceived degree of pain of the procedure. For example, minor procedures such as radiographs are perceived to have no to minimal pain. Minor surgeries, such as abscesses, are considered to have minor pain associated with them. Moderate surgeries, such as ovariohysterectomies or castrations, are considered to have moderate pain. And major surgeries, such as thoracotomies or exploratory laparotomies, are considered to have severe pain. Pre-emptive scoring is a very simple means of trying to address pain control prior to a surgery or procedure.

The observer’s subjective opinion as well as physiological signs can be described utilizing a pain scale such as a visual analog scale (VAS). VAS designed for use in non verbal human patients uses pictorial rather than numerical rating systems. The most common scale has a series of faces with varied expressions. The main difference between human and animal VAS is that in human medicine, the patient is the reporter of his or her pain level whereas in veterinary medicine VAS readings are most often provided by a veterinary technician who is always a second party reporter. The observer makes a mark on the scale as to how much pain the animal appears to be exhibiting. The veterinary VAS utilizes subjective 0-10 or 0-100 numerical ratings where 0 correlates with no pain and 10 or 100 being the worst pain imaginable.

Visual Analog Scale (VAS):

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0  No Pain                              50
   |                                    |
   |                                    |
   |                                    | 100
   |                                    |
   |                                    |
   |                                    |
   |                                    |
   | Most Severe Pain                   |
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Another type of subjective pain scale is a simple descriptive scale. This consists of a ranking system from 1-4. Number 1 indicates no pain, number 2 indicates mild pain, number 3 indicates moderate pain, and number 4 indicates severe pain. Although this scale is subjective, it is an easy way to record pain assessment in the medical record and watch trends over time.
Objective pain scales frequently include numerical pain scales, which assign a rank number to various categories and then the category numbers are added up for a final pain score. There are simple numeric pain scales that only include categories such as vocalization, movement, and agitation. There are more advanced pain scales that include categories such as comfort, movement, appearance, unprovoked behavior, interactive behavior, vocalization, heart rate, and respiratory rate. The Glasgow Pain Scoring system is one of the more frequently utilized advanced pain scale.

Pain assessments should be made at 4-6 hour intervals throughout hospitalization in the general patient population and much more frequently in the critical care setting where patient status is more dynamic. During the immediate postoperative period and throughout the critical phase patients should be monitored as often as every thirty minutes. For consistency, assessments should be performed by the same person whenever possible. Repeat recorded assessments allow evaluation of the efficacy of analgesic protocols and make response to specific drugs more obvious. A complete patient description including physiological signs (temperature, pulse, respiration) as well as behavioral signs (vocalization, posturing, eating and sleeping habits) should be documented in the medical record. A simple chart system allows evaluation of the efficacy of the analgesic protocol.

**Getting started:**

How to create the team

1. Getting endorsement hospital wide, establish pain team’s authority
2. Decide who should be on it, how many members, who the leader will be
3. Plan regular, organized meetings

Setting tasks

1. Reviewing existing protocols, including pre-emptive and perioperative analgesia
2. Interviewing key decision makers
3. Setting 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 pre-existing 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 non-pharmacologic 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.

4. Ordering new drugs or equipment
5. Setting a regular cage-side rounds protocol/frequency
6. Establish methods on how to involve the primary clinician

The team in action

1. Spreading the word
2. Establishing consult protocol, settling conflict
3. Follow up assessment, clinical data
The way to move the practice of pain management from a rote or happenstance event to a sound medical approach is by careful documentation of analgesic type, dose, frequency and most importantly, response throughout the treatment period.

4. Staying current (monitoring the IVAPM, continuing education, journal clubs, etc.)