

ARE YOU KEEPING SCORE? THE IMPORTANCE OF PAIN SCORING SYSTEMS

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What exactly is pain scoring and why is it important to utilize a pain scoring system with your patients? Assessing pain in all our patients is imperative, whether they come in having suffered a trauma, have a painful medical condition, or if they are there for a routine annual visit. It does not matter what they present for, pain assessment should be a part of the physical exam and collection of vitals. This is actually part of the American Animal Hospital Association's (AAHA) standards – that every veterinary patient have their pain assessed and recorded regardless of what they are presenting for. Pain should be considered as important of a vital sign along with temperature, pulse, and respiration. Working in veterinary medicine, we are of course dealing with non-verbal species, so therefore, we need to have a system for consistently assessing and recording pain scores in our patients.

There are some signs of pain that we can learn to easily recognize in our patients. Expressive markers, such as vocalization, are not always sensitive to pain. Physiologic markers like heart rate, respiratory rate, blood pressure are not specific for pain (unless it is an anesthetized patient); stress and anxiety can also affect these physiologic markers. Another sign we can look for are gait changes, and these are specific to musculoskeletal pain (acute or chronic). Changes in behaviour are something else that we should be aware of, although this is information we generally need to get from the owner as they know what their pet normally acts like. Abnormal posture is another sign that we should be assessing, although this sign is often less noticeable with chronic pain. Grimace scales are a very important tool we can make use of, especially for assessing acute pain. There are grimace scales and pain scoring charts available for many different species, but for the purpose of this talk, we will be limiting the discussion to canines and felines.

We've discussed what are some obvious signs of pain in our patients and how to recognize them, but it is also imperative that that we understand why we need to recognize and score pain. It is only when we recognize and realize that our patients are experiencing pain that we can learn to properly treat and manage it. There are many negative consequences to untreated and improperly treated pain. Pain needs to be treated or it can lead to both short- and long-term problems. With our patients that are suffering from acute pain, either from a trauma, a painful disease process, or following surgery, we need to start managing this pain as soon as possible in order to avoid negative consequences. In the short term, untreated and improperly managed pain can lead to immune system suppression, inflammation – both of which delay wound and incision healing and can lead to longer hospital stays. Anesthetic risk can be increased if pain isn't treated in a timely fashion, as higher doses of anesthetic drugs will be required to maintain the patient's plane of anesthesia. When an animal first experiences pain, the sympathetic tone increases, and this causes vasoconstriction, increased myocardial output, and increased oxygen consumption. Pain can cause the body to go into a catabolic state, also decreased GI motility, decreased urinary tone, retention of water and sodium, as well as an increase in the excretion of potassium – this can place the body into a critical state that puts the patient at risk for infection, slower healing, and morbidity. When a patient is in pain, they may not expand their chest fully and this can lead to atelectasis and increased carbon dioxide. A long-term concerning consequence of not treating pain, is that the patient can then develop chronic pain, which is very difficult to treat. We want to avoid this at all costs! Whenever possible, with surgery patients in particular, we want to treat pain preemptively, and with unplanned or unexpected pain that comes with trauma and injury, treating this pain as soon as possible is going to help us avoid these patients from having long-term negative effects.

Learning how to properly assess and score pain can take practice and skill, but it is a skill that all those on the veterinary team involved with patient care can learn. There are many pain scales available to use, and each has its own advantages and limitations. No matter which scales you choose, the most important criteria is to choose one that can have consistency between users, and is not overly burdensome, so it can then be used by the entire veterinary team. The main groups of pain scoring systems are *preemptive*, *subjective*, and *objective*.

Preemptive pain scoring involves predicting pain based on the diagnostics, procedure, or surgery to be performed. The next step is deciding if the pain is likely to be mild, moderate, or excruciating and then choosing an appropriate pain management plan. *Subjective* pain scoring uses the observer's opinion along with physiological signs and can utilize a visual analog scale (VAS). VAS was designed for use with nonverbal human patients and involves using facial expressions to determine the patient's pain level. This can be used in our nonverbal, veterinary patients as well by observing not only the patient's facial expressions, but also body position. Although this type of scale is subjective, it

gives us a simple way to assess and record pain in our patients and watch to see if it is trending up or down. *Objective* pain scales are more advanced and take into account such categories as comfort, movement, appearance, behaviour, vocalization, and physiological signs such as heart rate and respiratory rate. By observing the patient's behavioural signs, it also tells us how the pain is making the patient feel, and therefore this does make this type of assessment more useful. There are also *chronic* pain scales that are available; these scales require a great deal of input from the owner on how the pet is acting at home.

Pain assessments need to be performed on a regular basis on hospitalized patients; preferably every 4-6 hours on stable patients, and more frequently on our critically ill patients as things can change so much more quickly with this patient population. Patients just coming out of surgery should be assessed as frequently as every 30 minutes, until we have a good grasp on whether their pain has been well controlled. No matter which category of patient we are assessing, we should be recording not only their pain score, but their physiological and behavioural signs, and whether the analgesic protocol being used seems to be effective or not.

Pain assessment and scoring in veterinary patients can be very challenging, but it is a skill that can be learned, and we should be performing this on all our patients. There is no "one size fits all" pain scoring or even pain management – we need to treat each patient as an individual. If we suspect a patient is in pain, we should treat them – how they respond to pain medication will also give us information on what their pain score might be. We all got into this field because we love and want to help animals, so we should constantly be trying to do better for all our patients. Keeping pain control in mind as we look after our patients means they get better care and have improved outcomes.

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