Taking Away the Pain of Pain-Scoring

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AIMS OF LECTURE

Pain management is an important, but largely unexplained aspect to medical care. The added difficulties involved with assessing pain in veterinary species makes pain management an often challenging component to the veterinary professional's duties toward their patient(s). What pain is and looks like is multifaceted and requires training for the veterinary care giver to appropriately address it. Before one can choose an analgesic agent or method for their patient, they must first be able to accurately assess whether pain is present & if so, where, how, and what form of pain is present. This lecture will discuss what pain is in both human and veterinary individuals, why understanding pain is important for the veterinary professional, and how to accurately assess pain in our various species through the use of validated pain scoring systems.

DEFINITION OF PAIN

Pain is defined as "an unpleasant sensory and emotional experience associated with potential or actual tissue damage". It is important that the veterinary professional understand what physical and emotional signs of pain appear as in the various species we work with.

CONSEQUENCES OF PAIN

The pain response, regardless of cause or type, can result in many negative physiologic consequences if not managed. Pain activates the sympathetic nervous system which can negatively alter steroid secretion, insulin resistance, electrolyte & fluid status, and various aspects of metabolism. Pain impacts the following organ systems in various ways: cardiovascular, respiratory, gastrointestinal, renal, endocrine, musculoskeletal, central-nervous, and immune systems. If left untreated, pain can result in negative outcomes for the CV and respiratory systems, wound healing, and emotional well-being. Pain that is either not prevented or left untreated has the likelihood of transforming into chronic pain, which can result in further negative consequences & reliance on analgesics for the patient and their caregivers.

PAIN ASSESSMENT

Assessing pain in animals is multifactorial including: species, breed, environment (e.g. at-home vs in-hospital), concurrent disease(s), and method used to evaluate pain as well as the various forms of pain that may or may not be present. The following are important aspects that go into pain assessments:

- Spontaneous Pain Behaviors – *attitude or changes in attitude from normal behaviors*
- Facial Expression & Appearance – e.g. *Grimace Scales which are species-specific*
    - Grimace Scales do not incorporate physical manipulation as part of pain assessment
- Posture – *pain is often depicted by "praying" position, stretched or hunched posture*
- Activity Level – *changes or complete reluctance toward activity can be an indication of pain*
- Attention Toward Site of Concern – *the individual may pay closer attention to the source of pain through various actions (e.g. eye contact or licking), which may result in self-mutilation*
- Physiologic Variables – *alterations in vitals (e.g. HR, RR, pupil size) can indicate presence of pain*
    - These variables are not always conclusive for the presence or absence of pain…

PAIN SCORING SYSTEMS

Utilization of a pain scale or scoring system improves accuracy of detecting pain, treating pain, and preventing overuse of analgesics in both human and veterinary medicine. Pain assessment tools are often specific to either acute or chronic pain, thus careful application of a pain scale is important to ensure accurate pain assessment occurs. Some pain assessment tools are classified as "validated" which indicates the assessment tool produces repeatable & consistent results regardless of the user's comfort or experience in the specific tool. Validated pain scoring systems exist in some, but not all, veterinary species. Examples of validated pain scoring systems in dogs & cats include: *UNESP-Botucatu* and *Glasgow Composite Measure Pain Scale (GCMPS).* These examples are specific only to acute pain and would not be appropriate in assessing a dog or cat with chronic osteoarthritic pain, for example. While utilization of non-validated pain scales (e.g. *Colorado State Acute Univ Pain Scale)* can still provide the assessor with information regarding pain in their patient, there are a multitude of limitations to these forms of pain assessment tools that may lead to inaccurate pain identification and/or treatment. Many pain scoring systems include an "intervention level" or a score that signals to the assessor that this individual's pain level requires treatment (i.e. intervention). For some systems - *like the GCMPS* – the intervention level may be altered by species or level of mobility. When instituting pain scoring systems in practice, it is not only important that team members are aware of the chosen pain scoring system's pros & cons, but also when the intervention level is reached in order to know when to notify the veterinarian & provide adequate analgesic care for that individual.

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