PAIN MANAGEMENT AND COMFORT OF THE HOSPITALIZED GERIATRIC DOG
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Key Points
- Geriatric patients with chronic pain need additional pain control while in the hospital
- Careful attention to handling, environment and nursing care can reduce pain generation in hospitalized patients

As our patient population ages, we are providing ever more sophisticated in-patient care to geriatric animals. Effective pain management, minimizing anxiety and maximizing comfort to these patients is paramount to their owners and our goal.

General Principles
Some or, sometimes, most of the pain and distress that geriatric patients experience in the hospital setting can be prevented or reduced by approaching these patients from a more comprehensive perspective. We tend to think about pain simplistically as very compartmentalized (e.g. post-op pain comes from surgical trauma), but the nervous system does not. It is also clear that anxiety and distress raise pain levels and change the perception of pain. By focusing on aspects of care like careful handling and reducing anxiety, we reduce additional pain generation that is often overlooked during hospitalization.

Patients with chronic pain have different physiological responses to acute pain than other patients. An “experienced” pain system requires less stimuli to react (i.e. increase pain) than a naïve one. Because of this, more pain control is needed for these patients than might be expected from the typical response to a given procedure.

Changes in cognitive function will also change responses to experiences and pain. Many owners are unaware of the signs of dementia present in their geriatric pets. Geriatric animals may exhibit increased anxiety, especially separation anxiety, and this may be most evident during the late afternoon or evening hours. For most geriatric animals, any change in routine causes distress and setbacks in chronic pain management.

Nursing care and husbandry considerations
Careful consideration to environmental factors can greatly reduce anxiety and pain generation in geriatric patients. Important variables include ambient environment including temperature and noise and physical cage set up including flooring surface.

The use of simple rehabilitative techniques and devices can greatly aid in patient comfort and make nursing care of non-ambulatory patients much easier.

Handling during procedures and examination
Excessive restraint can cause significant morbidity and greatly increase pain from otherwise quiescent musculoskeletal problems. Use non-skid bath or tub mats or yoga mats to provide secure footing when restraining small patients. Use blankets and Elizabethan collars for restraint. Take the time to plan and write monitoring orders so that blood draws are grouped and sedation or anesthesia time is utilized for multiple procedures.

Radiology procedures are an overlooked place where minor trauma may increase pain in geriatric patients. Simply in the course of positioning for x-rays, joints may be pulled past

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normal range of motion, and struggling during lifting can tweak a sensitive back, among other common mishaps. Sedation may ultimately be safer and less traumatic than struggling.

Management during sedation and general anesthesia (GA)

Handling of the sedated or anesthetized patient: Many typical handling procedures on anesthetized patients can greatly increase muscle soreness and exacerbate preexisting painful conditions. Moving patients when their muscles are relaxed can allow for joints to move beyond typical and comfortable range of motion. Recumbent positions and even short periods of immobility on hard surfaces can cause muscle soreness and stiffen already stiff joints. Certain surgical positioning may predispose to post-operative soreness as well (e.g. an extended neck and fully open jaw in dental patients). Geriatric patients with advanced OA may have significant difficulty standing and ambulating after periods of recumbency.

Pain management guidelines

Chronic pain causes hypersensitivity to additional painful stimuli: Many geriatric patients have undertreated pain from sources such as chronic back or neck pain, oral pain, urogenital or chronic visceral abdominal pain. These patients will experience central sensitization to pain and can be easily stimulated to have pain that is disproportionate to the current surgical procedure or medical problem.

Geriatric patients may have exaggerated responses to opioids and sedatives: Although this is rarely a reason to withhold or reverse analgesics, try using smaller doses than usual. As when inducing general anesthesia, give post-operative analgesia to effect. This is accomplished by starting with a moderate dose and giving partial doses as needed after reaching peak effect times. Remember that some opioids reach peak effects within a few minutes of injection and some (e.g. Buprenorphine) take 30 minutes or more. This method can be adapted to oral analgesics as well. Adjust dose intervals based on response as well. Patients are likely to need more frequent dosing in the first 24 hours post-operative than in the subsequent period. Based on response to medications early on, doses may be decreased, too. Don’t be afraid to use sedation in the immediate post-operative period to reduce anxiety. Although this may result in more recumbent time, if titrated closely, the overall effect may be much reduced distress and morbidity.

Judicious use of non-steroidal anti-inflammatory analgesics (NSAIAs) can be highly effective: Despite the inherent risks, it is possible to use single or a few, moderate doses of NSAIAs in many patients with relatively low risk. If a geriatric patient is already on chronic NSAIA therapy, continue that in the hospital as soon as their vital signs are stable, they are normovolemic, and, preferably, eating. These patients may be dependent upon their NSAIAs for ambulation. Patients who are not regularly on NSAIA therapy but have adequate renal, hepatic, and GI function may be greatly helped by an oral dose the day before a scheduled procedure (before fasting is begun). Alternatively, a single dose post-operatively will reduce opioid requirements and improve pain control.

Aggressively treat secondary causes of pain and discomfort: Consider that common signs of illness can significantly impact patient’s comfort. Common sources may be nausea, vomiting, vertigo/dizziness, tenesmus, urine scald, and pruritis

Include non-pharmacological methods of pain control in protocols: Cryotherapy, PROM and simple rehabilitation techniques, and acupuncture can all greatly improve post-op pain control.