

Building optimal analgesic protocols with the 2022 ISFM acute pain management guidelines

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Disclosure

Consultancy services

Boehringer Ingelheim, Dechra, Elanco and Zoetis

Key-opinion leader

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2022 ISFM Consensus Guidelines on the Management of Acute Pain in Cats

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Practical relevance: Increases in cat ownership worldwide mean more cats are requiring veterinary care. Illness, trauma and surgery can result in acute pain, and effective management of pain is required for optimal feline welfare (ie, physical health and mental wellbeing). Validated pain assessment tools are available and pain management plans for the individual patient should incorporate pharmacological and non-pharmacological therapy. Preventive and multimodal analgesia, including local anaesthesia, are important principles of pain management, and the choice of analgesic

drugs should take into account the type, severity and duration of pain, presence of comorbidities and avoidance of adverse effects. Nursing care, environmental modifications and cat friendly handling are likewise pivotal to the pain management plan, as is a team approach, involving the cat carer.

Clinical challenges: Pain has traditionally been under-recognised in cats. Pain assessment tools are not widely implemented, and signs of pain in this species may be subtle. The unique challenges of feline metabolism and comorbidities may lead to undertreatment of pain and the development of peripheral and central sensitisation. Lack of availability or experience with various analgesic drugs may compromise effective pain management.

Evidence base: These Guidelines have been created by a panel of experts and the International Society of Feline Medicine (ISFM) based on the available literature and the authors' experience. They are aimed at general practitioners to assist in the assessment, prevention and management of acute pain in feline patients, and to provide a practical guide to selection and dosing of effective analgesic agents.

Keywords: Acute; analgesia; anti-inflammatory drugs; behaviour; dental; facial expressions; pain assessment; opioid; ovariohysterectomy

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‘Pain management is not only about giving an analgesic drug: the emotional needs of the cat must be considered, and the patient should always be treated with respect and empathy’

Steagall et al. 2022 - ISFM guidelines

Feline drug metabolism and excretion

- Possible impact on analgesia and drug choice
- Drugs via metabolic conjugation, oxidation or unchanged

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Feline comorbidities and analgesia

- Chronic kidney disease
 - Ketamine
 - NSAIDs
 - Gabapentin




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Original Article



Serum concentrations of gabapentin in cats with chronic kidney disease

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Building an analgesic plan

Each cat is unique

Principles of acute pain management

- Preventive analgesia
- Multimodal analgesia
- Combination of pharma and non-pharma therapies

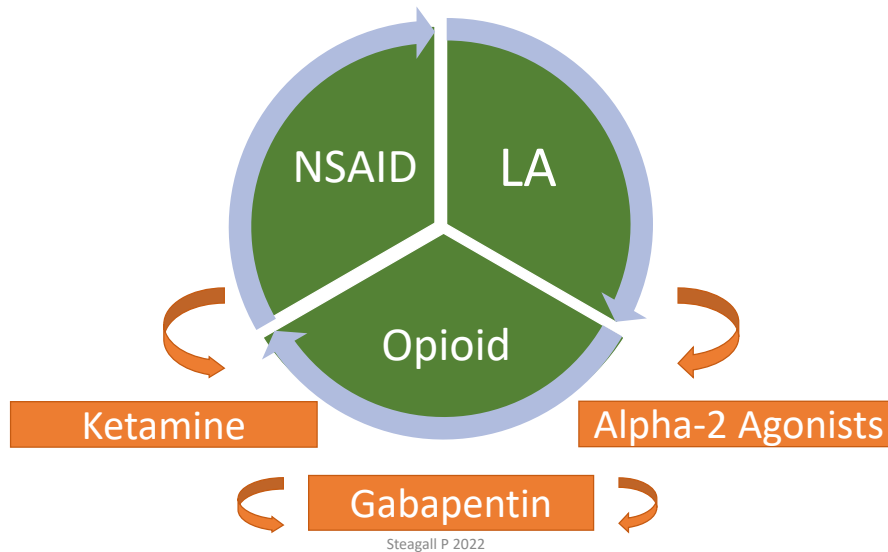
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Preventive analgesia

- Preventive analgesia refers to *all types* of perioperative techniques and efforts to decrease postoperative pain
- Analgesic treatment is administered at *any time* and for *any duration* needed for pain relief in the perioperative period

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Multimodal analgesia: pharmacological options



The four questions in acute pain

1 – Is there a local anesthetic block that I can use?

2 – What is the opioid of preference?

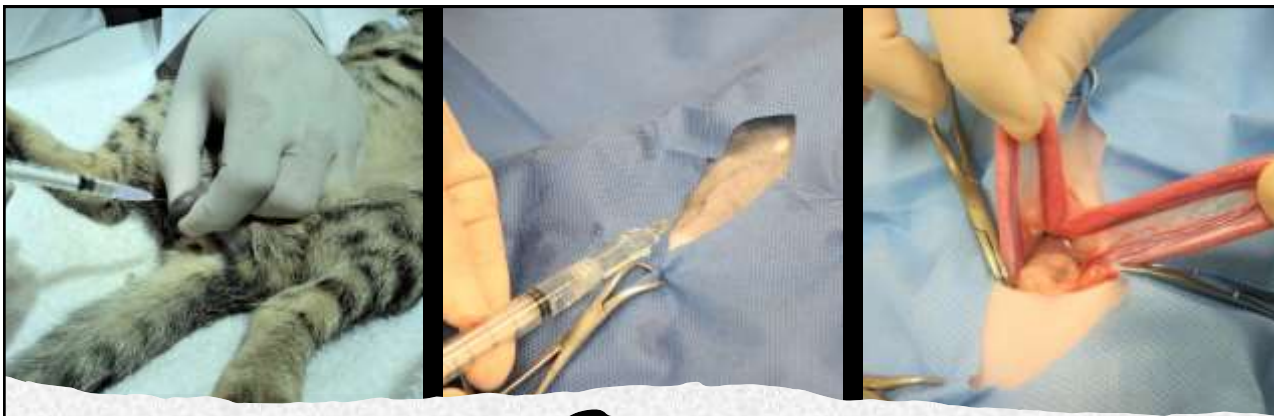
- Need, doses and routes of administration

3 – Are there contra-indications for NSAID administration?

4- Is there a need for adjuvant analgesics?

- Tramadol, gabapentin, ketamine CRI, etc.

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Local anaesthetic blocks

- Intraperitoneal
- Incisional
- Intratesticular

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CAPSULE REVIEW

Intraperitoneal and incisional analgesia in small animals: simple, cost-effective techniques

P. V. M. STEAGALL ^{1*}, J. BENITO^{*}, B. MONTEIRO ^{*}, D. LASCELLES[†], P. W. KRONEN[‡], J. C. MURRELL [§], S. ROBERTSON[¶], B. WRIGHT^{||} AND K. YAMASHITA^{**}

Journal of Small Animal Practice (2019)
DOI: 10.1111/jsap.13084

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Opioid analgesics

- Which one? When? What route?
 - Methadone
 - Buprenorphine
 - Butorphanol
- Opioid shortage or unavailability
- The concept of opioid-free and opioid-sparing

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NSAIDs

- Inflammation and acute pain
- Contraindications
- Fear of NSAID-induced adverse effects
- Which one?



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Adjuvant analgesics

Dexmedetomidine (premedication)

Ketamine infusion

Tramadol (PO or IM/IV)

Gabapentin (PO)

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Choosing
the
analgesic
protocol

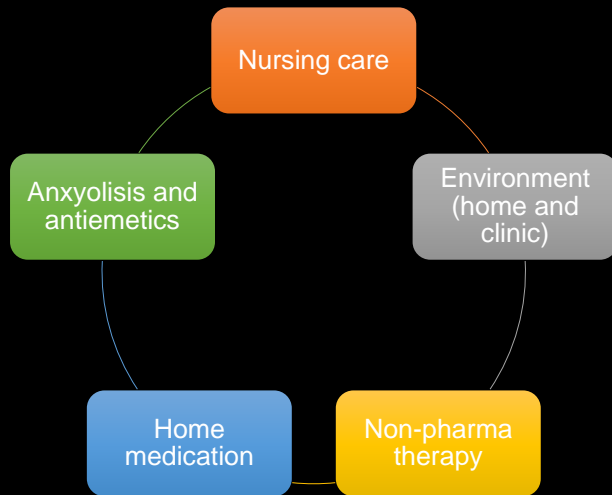
Table 5 Key concepts (TELLS) used for pain management,* with specific examples.

	Examples	Comments
Type of noxious stimuli	Visceral, neuropathic, somatic, orofacial, oncologic	Certain analgesic drugs may be more effective for certain types of pain. For example, analgesic drugs that help treat peripheral or central sensitisation (eg, ketamine or methadone) may be an appropriate choice in cases of neuropathic injury
Expected duration of noxious stimuli	Transient stimuli of <2 h (placement of a urinary catheter or endoscopy) vs prolonged and sustained (24–72 h) stimuli, following surgery	This should affect frequency and need for pain assessment. Analgesic drug may be determined based on duration of action. Hospitalisation and analgesic infusions may be required
Location of noxious stimuli	Thoracic limb, pelvic limb, orofacial, abdominal, intrathoracic	Useful when considering locoregional techniques
Location of patient during treatment	Outpatient or inpatient	This may influence the route and frequency of analgesic administration (dosage regimens). Also the frequency of pain assessment
Severity of noxious stimuli	Mild, moderate or severe	May affect the dose and choice of analgesic drug class

*These concepts help determine the dose, frequency, type and route of analgesic drug(s) to be provided

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More than
analgesic
drugs...



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Anxiety and stress during transportation: gabapentin

- Premedication starts at home
- 100 mg/cat PO; 90 minutes before the veterinary visit

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Gabapentin — Perioperative use

Original Article



fms
Feline Medicine and Surgery

Analgesic effects of gabapentin and buprenorphine in cats undergoing ovariohysterectomy using two pain-scoring systems: a randomized clinical trial

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SAGE

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Antiemetics: maropitant

- NK-1 receptor antagonist blocking substance P
- Patient Comfort
 - Reduced vomiting and discomfort after opioids
 - CKD
- Clinical use
 - Reduced vomiting, improved recovery and appetite
 - 1 mg/kg SC, 1h before opioid administration
 - 8 mg/cat PO, 2.5h or 20h before premedication

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Nursing care

- Patient positioning
- Nutrition
- Fluid therapy
- Bladder care
- Management of constipation

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Non-pharmacological therapy

- Wound care
- Comfortable bandaging
- Cold therapy

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Environment (clinic)

- Cat Friendly Clinic
 - ISFM Cat Friendly Clinic accreditation
 - AAFP Cat Friendly Practice Program
- Away from dogs
- Comfortable bed
- Somewhere to hide
- Gentle handling and stress reduction



Environment and home meds

- Comfortable and quiet
- Sleeping/resting area
- A place to hide
- Easy access to resources (food, water, litter box)



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A BRIGHT FUTURE FOR FELINE PAIN MANAGEMENT

- Feline Health in first place
- Avoiding fear, stress and anxiety
- Feline friendly handling techniques
- Understanding of feline behaviors
- Automation of feline pain assessment
- Novel drugs for feline pain management

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FDA-APPROVED TRANSDERMAL BUPRENORPHINE

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Home | About & Services | News & Events | Contact Us | FDA Approves First Transdermal Buprenorphine for the Control of Post-Surgical Pain in Cats

FDA Approves First Transdermal Buprenorphine for the Control of Post-Surgical Pain in Cats

January 20, 2022

Today the U.S. Food and Drug Administration approved Zocbium (buprenorphine transdermal solution), the first transdermal buprenorphine animal drug intended to control pain in cats after surgery.

Buprenorphine is an opioid pain medication that works by acting on pain receptors in the central nervous system. Zocbium is a solution that is applied to the skin at the base of the neck of the cat and is rapidly absorbed into the layers of the skin. It provides pain relief within 1 to 2 hours following administration and continually releases buprenorphine into the body over a period of days. A single application provides pain relief to the cat for four days. Because Zocbium is a long-acting transdermal solution applied in the veterinary hospital, it may eliminate or reduce the need for cat owners to administer additional pain medications.

This approval gives veterinarians an additional option for managing postoperative pain in cats. The FDA previously approved Simbadol, an injectable buprenorphine, for use in cats. The FDA also previously approved a nonsteroidal anti-inflammatory drug, Onsite, as a tablet and injection for use in cats for postoperative pain. Zocbium is the first buprenorphine product the FDA has approved that is applied to the cat topically.

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PAIN ASSESSMENT



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FINAL REMARKS

- Basics
- Simple and practical
- TLC



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