



VetTimes

PAIN MANAGEMENT

MINI

guide



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Latest pain management guidelines for cats and dogs

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explains the analgesic protocols and approaches for different surgical and medical conditions

In late 2022, an updated and refreshed version of the WSAVA guidelines for the recognition, assessment and treatment of pain was published by the WSAVA pain committee.

These guidelines are free to download from the WSAVA website at (scan QR code) and are divided into three sections:



Section one focuses on the **pathophysiology of different types of pain**, as well as emphasising the importance of accurate recognition and quantification of acute, and chronic, pain in cats and dogs. It describes in detail the different tools available to quantify acute and chronic pain and provides web links to the tools that are freely available online. **1**

Section two describes the **pharmacology of the drugs** that can be used to provide analgesia in animals and their respective advantages and side effects. Recommended dose ranges are provided and clinical questions that often arise around the use of analgesic drugs are answered. **2**

Section three provides **analgesic protocols and approaches** for the management of different surgical and medical conditions in cats and dogs. This section is designed to be practical and accessible to all veterinary practitioners worldwide, for example, providing drug protocols that can be used in areas of the world where opioids are not freely available to treat veterinary patients. **3**

This article focuses on section three of the pain guidelines, highlighting recommendations for the treatment of pain associated with common surgical and medical conditions in cats and dogs.

In the UK there are veterinary licensed opioids available for the treatment of pain; therefore, protocols involving opioid administration will be highlighted.

Castration and ovariohysterectomy in cats

The severity of pain associated with castration and ovariohysterectomy in cats (**Figure 1**) is closely related to the degree of surgical trauma; therefore, careful tissue handling and adherence to good surgical principles are recommended.

Many different protocols can be used to provide analgesia and anaesthesia for cats undergoing castration and ovariohysterectomy. The use of alpha-2 based protocols have now become very popular for neutering in the UK, and a combination of an opioid, alpha-2 agonist and ketamine will provide premedication, induction and maintenance of anaesthesia, although, facilities should be available to extend the duration of anaesthesia if necessary.

Intubation might not always be necessary for short procedures →

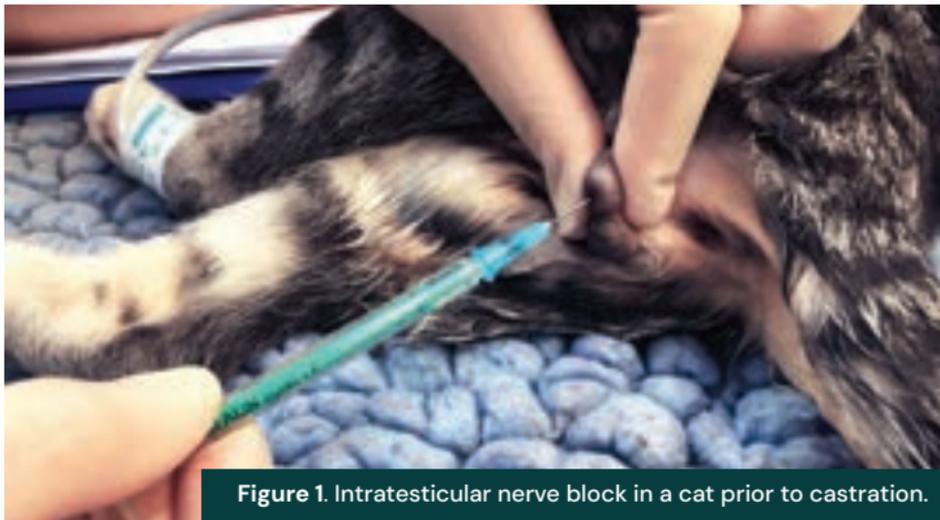


Figure 1. Intratesticular nerve block in a cat prior to castration.

such as castration in cats, although oxygen should always be supplemented by face mask if intubation is not carried out and the facilities to intubate should be available if necessary. Data comparing the analgesic efficacy of different opioids for neutering are conflicting, with some studies showing no difference between butorphanol, buprenorphine and methadone (Bortolami et al, 2013; Slingsby et al, 2015), while another study showed methadone to provide superior analgesia to buprenorphine in cats undergoing ovariohysterectomy anaesthetised with the QUAD (opioid, midazolam, medetomidine and ketamine) protocol (Shah et al, 2019).

Differences in results likely relate to timing of NSAID administration

and whether cats undergoing both castration and ovariohysterectomy or just ovariohysterectomy were considered in the study design. Generally, butorphanol is considered to provide poor analgesia in cats and dogs, and is short acting; therefore, longer-acting opioids such as methadone and buprenorphine are preferred for neutering in both cats and dogs.

Local anaesthetic techniques are recommended for both castration – intratesticular nerve block with lidocaine (Moldal et al, 2013) – and ovariohysterectomy, with incisional and intraperitoneal blocks with bupivacaine (Benito et al, 2018; Steagall et al, 2020).

NSAIDs are pivotal to perioperative analgesia for neutering in cats, although some debate exists about

the duration of NSAID analgesia required after neutering surgery, with one study suggesting that three days' analgesia is necessary after ovariohysterectomy (Väisänen et al, 2007) and another suggesting that a single dose of an NSAID at the time of ovariohysterectomy is sufficient for most cats (Hillen et al, 2023).

Castration and ovariohysterectomy in dogs

The recommendations for castration and ovariohysterectomy in dogs are very similar to those in cats, with similar drug protocols being suitable for the different species. One study has compared the efficacy of

methadone and buprenorphine for ovariohysterectomy in dogs and found methadone to be superior to buprenorphine for this procedure (Shah et al, 2018).

Similar local anaesthetic techniques are appropriate for neutering in dogs as in cats, and use of these is to be encouraged as they will reduce the amount of maintenance agent required to maintain anaesthesia and provide postoperative analgesia for a number of hours after surgery.

Orthopaedic surgery

Orthopaedic surgery (**Figure 2**) is generally associated with moderate to severe pain in cats and dogs, and general anaesthesia for these →



Figure 2. A dog presenting with an open fracture of the femur.

procedures is a prerequisite.

Analgesia protocols should be based on the principles of multimodal analgesia (the practice of using analgesics from different drug classes in combination) and preventive analgesia.

Preventive analgesia is a principle that has replaced the concept of pre-emptive analgesia and involves the administration of analgesic drugs early (ideally before the onset of pain) and for sufficient time to prevent the onset of central sensitisation (Pogatzki-Zahn and Zahn, 2006). It is important to distinguish multimodal analgesia from uncontrolled polypharmacy; the different classes of drugs selected should ideally be based on knowledge of underlying pain mechanisms.

As with all inflammatory pain conditions, NSAIDs form the cornerstone of analgesic regimens, but attention should be paid to potential side effects and contra-indications in some patients – particularly when cardiovascular instability is expected during anaesthesia.

Local anaesthetic techniques are also pivotal, and most orthopaedic surgeries can use a regional anaesthetic technique to help with intraoperative and postoperative analgesia blocks (for example,

epidural or femoral and sciatic nerve blocks for hindlimb procedures, brachial plexus, RUMM [radial, ulnar, median and musculocutaneous]) for forelimb procedures. These blocks are described with illustrations in the WSAVA pain guidelines.

Premedication with methadone has been shown to provide superior analgesia to premedication with buprenorphine in dogs undergoing orthopaedic procedures (Hunt et al, 2013). Intraoperative analgesia can be supplemented with opioid infusions – for example, a fentanyl continuous rate infusion (CRI), a ketamine CRI or a lidocaine CRI, although lidocaine CRIs for analgesia are not recommended in cats due to the negative effects on haemodynamics (Pypendop and Ilkiw, 2005).

Postoperative analgesia should comprise opioids, generally for at least 24 to 48 hours, NSAIDs for days to weeks and adjunctive therapies like cold (Wright et al, 2020) and physical rehabilitation. Paracetamol might also play a role in perioperative analgesia for orthopaedic surgery in dogs.

Quantification of pain using validated pain scoring tools such as the Short Form of the Glasgow Composite Pain Scale–Canine for dogs (Testa et al, 2021) or the Glasgow Composite Pain Scale–Feline

Figure 3. A cat showing marked salivation after the administration of opioids.



(Calvo et al, 2014) or Feline Grimace Scale (www.felinegrimacescale.com) for cats is essential to ensure that postoperative analgesia is adequate, avoiding the potential for both over and underdosing of analgesics.

The optimal duration of analgesia after major orthopaedic surgery in both cats and dogs is unknown – especially once animals are discharged to their carers. Educating carers about signs of pain in cats and dogs can be helpful to ensure that analgesia is sufficient in the postoperative period.

Medical pain

The term “medical pain” encompasses conditions not primarily associated with surgery or

trauma, and can comprise a wide variety of conditions, many of them involving visceral pain.

Visceral pain is recognised to be difficult to localise (probably due to the phenomenon of referred pain) and diffuse in nature, and can arise from enlargement of solid organs, inflammation of any organ (for example, pancreatitis) or distention of hollow organs, such as the gut.

Obviously, the goal of therapy is to treat the underlying medical complaint, but analgesics should be given at the same time to ensure the comfort of the animal during diagnosis and treatment.

Opioids form the mainstay of treatment for medical conditions, but it is important to avoid →

opioids that are more associated with emesis, such as morphine, and to be aware that both buprenorphine and methadone can be associated with nausea. This is commonly seen as excessive salivation after opioid administration to both cats and dogs (**Figure 3**) and may be managed by the administration of an anti-emetic such as maropitant (Hay Kraus, 2017).

Placement of an intravenous catheter for the administration of opioids avoids the need for repeated intramuscular or subcutaneous injections of opioids that can be painful and

stressful for the animal. NSAIDs are contra-indicated in animals that are haemodynamically unstable, have acute kidney injury or gastrointestinal compromise. Paracetamol might be an alternative option for dogs when NSAIDs are contra-indicated.

Neuropathic pain protocols

Neuropathic pain (**Figure 4**), caused by damage to the somatosensory nervous system, is recognised to be extremely difficult to manage effectively in both humans and animals.

It is always maladaptive and is



Figure 4. A dog with neck pain likely of neuropathic origin.

underpinned by changes in the central nervous system, leading to hyperalgesia and allodynia, which are extremely unpleasant for the animal (Adrian et al, 2017). Gabapentinoids (gabapentin or pregabalin) have been used as the first line treatment for neuropathic pain in cats and dogs, with some studies reporting an improved quality of life following administration (Plessas et al, 2012; Plessas et al, 2015).

Oral N-methyl-D-aspartate (NMDA) receptor antagonists such as amantadine or memantine might also be effective for the management of neuropathic pain because of their ability to down-regulate the NMDA receptor, which plays a key role in the onset and maintenance of central sensitisation. Only one study has investigated the analgesic efficacy of amantadine in dogs. This study investigated amantadine 3mg/kg to 5mg/kg once daily in dogs with osteoarthritis pain that was refractory to NSAIDs and found that dogs receiving amantadine and meloxicam had lower owner-assessed pain levels compared to administration of meloxicam alone (Lascelles et al, 2008).

One study has investigated the use of amantadine (5mg/kg once

daily) in cats with osteoarthritis and found that although amantadine reduced activity, it improved owner perceived scores of mobility and quality of life (Shipley et al, 2021).

A recent trend has emerged towards low-dose SC administration of ketamine for osteoarthritis pain in dogs and cats, although to date no studies support this practice. Animals presenting with severe signs of neuropathic pain might require hospitalisation for IV therapy with opioids, ketamine or lidocaine administered by CRI, although lidocaine CRIs should be used cautiously in cats due to haemodynamic compromise.

Conclusion

The WSAVA 2022 pain guidelines provide a comprehensive, evidence-based, state-of-the-art overview of current recommendations for the recognition, assessment and treatment of pain in cats and dogs.

Great advances have been made in pain assessment tools for cats and dogs in the past 10 years, with robust validated tools now freely available to the veterinary practitioner for use in clinical practice. The availability of licensed drugs has also increased in the UK, which is fortunate to have a wide repertoire of licensed opioids and →

NSAIDs available for use, making it easier to provide adequate analgesia for small animals experiencing mild to moderate to severe pain. Scan the QR code for WSAVA guidance.

* Use of some of the drugs in this article is under the veterinary medicine cascade.

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Jo Murrell



Jo Murrell joined Bristol Veterinary Specialists after a career in academia, most recently at the University of Bristol from 2007-18. While at Bristol, she focused her time on pain research and clinical anaesthesia, and has carried out many studies investigating pain mechanisms and clinical analgesic protocols in cats, dogs and horses. She has been a diplomate of the European College in Veterinary Anaesthesia and Analgesia since 2002 and enjoys the challenges of clinical anaesthesia. Jo is excited to become co-chair of the WSAVA Global Pain Council with professor Paulo Steagall and is passionate about providing best practice in analgesia to cats and dogs.



Facebook to Consult Room Discussing Pet Health Information

Effective communication within the consult room has always been important, but the rise in popularity of social media (SM) platforms adds another layer of complexity when faced with a concerned owner asking about online content.

Facebook groups are a common source of pet health information, with just over half of dog and cat owners reporting receiving and giving health information through these groups¹. Whilst such groups can provide support for owners, it's important to recognise that SM may over-emphasise and repeat negative information.

Despite the apparent high usage of SM groups, veterinary professionals remain the preferred source for health-related information for owners^{1,2,3}.

This doesn't change the fact that these can be challenging conversations, particularly when time pressed. Having a clear understanding of

product safety assessment helps with these conversations whilst remaining empathetic.

For a product to gain a licence and be made available for use, multiple safety and efficacy studies are carried out to gain approval by the relevant regulatory authority. This process is robust, often taking several years; on average it's 10 years from concept of a product to launch⁴. Pharmacovigilance is defined as the science and activities relating to the detection, assessment, understanding and prevention of adverse effects (AE's) or any other medicine related problem⁵. This is an on-going process which occurs post launch with medicinal products and is vital to continue monitoring safety and efficacy when a product is used in larger numbers of animals and for longer durations. This is a mandatory process for market authorisation holders (MAH's);

they are legally required to report any suspected reaction, regardless of potential causality, to the relevant regulatory body. These reports are also shared to other regulatory bodies globally. The Veterinary Medicines Directorate (VMD) is the regulatory body in the UK and they, working closely with the MAH, continually review AE report data to ensure that the overall benefits of each UK licensed veterinary medicine outweigh any risks posed by their potential AE's. The AE data is evaluated in terms of possible causality and against the total number of doses sold globally; this information is used to amend the product's Summary of Product Characteristics (SPC) where needed.

Using Librela as an example, based on Periodic Safety Update Report data, fewer than 15 animals have experienced an AE for every 10,000 doses of Librela sold⁶, with additional AE's listed post-launch being classified as rare (1-10 animals/10,000 treated) or very rare (<1 animal/10,000 treated)⁷. Whilst the occurrence of any AE can be distressing

for the owner and the vet managing the case, the SPC information can help guide clinical decisions via risk:benefit assessment.

SM posts are not restricted by geographical boundaries which can lead to concern from owners reading about differences in product labels in other countries. It's important to be aware that legislation and guidelines regarding AE report analysis varies geographically, which is why these differences can exist.

There is the potential for an AE with any medicinal product, however the product SPC remains the best source of data-driven information for both owners and veterinary professionals. Owners want to make the best choice for their pet in any given situation and it's understandable that they may have questions about online information. The veterinary practice can help put these posts into perspective and aid owners with their decision making.

If a pet owner, or you, suspect an adverse reaction with any Zoetis products, please report this to our pharmacovigilance team on 0345 300 3084, via our online form: www2.zoetis.co.uk/contact-us or via email: customersupportUK@zoetis.com

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Expert Insights

The role of monoclonal antibodies (mAbs) in osteoarthritis (OA) management for pets

Image: Zoetis

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In a recent expert panel, **Duncan Lascelles** and **John Innes** explored the latest evidence on mAbs and their role in multimodal OA management.

Q Could you explain the mechanisms behind OA pain and why nerve growth factor (NGF) is a key target for treatment?



Prof Innes: Over the past two decades, research has shown that NGF is a major mediator of joint pain. When a joint undergoes biomechanical stress, molecules from the extracellular matrix stimulate immune cells, leading to the production of cytokines but also NGF. NGF then binds to nociceptors, particularly the TrkA (*Tropomyosin Receptor Kinase A*) receptor, inducing both peripheral and central sensitisation—essentially amplifying pain signals. So NGF is a key mediator of joint pain as we now understand it.

Q How does NGF relate to inflammation in OA and how important is this?



Prof Innes: NGF plays a dual role – it not only contributes to pain but also stimulates immune cells to release further inflammatory cytokines, creating a positive feedback loop. Both pain and inflammation are important, but pain relief is often the most immediate concern as it's the pain which bothers the patient, and which bothers the owner as well.

Q OA is traditionally associated with older pets, but recent research suggests a high prevalence in younger dogs. Can you tell us more about that?



Prof Lascelles: Yes, and I need to credit John here because for years he's spoken to me about the fact that osteoarthritis in dogs is driven primarily by developmental disease and of course this abnormal joint development occurs in young animals. Our recent study¹ examined dogs between eight months and four years of age and found that approximately 40 per cent had radiographic evidence →



Image: Zoetis



Image: Zoetis

of OA. Around 16 per cent exhibited moderate or greater pain, while 25 per cent had mild or greater pain, so really surprising figures.

Q The study also found that many owners weren't recognising these signs, why do you think that is?

 **Prof Lascelles:** When pain is first present, dogs will initially try to adapt to that, such as bunny hopping. In this study¹ looking specifically at young dogs, we found that many owners weren't identifying the adaptations that their dogs were making. I would also say as veterinary professionals, we aren't identifying these adaptations that result from pain; we are still focused on signs indicative of activities not being able to be performed. We need that mindset change, to think about how these

particular individuals may present and think about the adaptations these dogs are instigating to try and cope with the pain.

Q Are you comfortable using mAbs in younger OA patients*, considering they may require longer treatment periods?

 **Prof Lascelles:** I am, but I also believe we need to shift our approach to pain management. Instead of short-term interventions when pain is severe, sustained pain relief allows pets to remain active, which supports weight management and muscle strength. These considerations are interlinked; continuous provision of pain relief allows these dogs to further improve. If we have a multimodal approach, it may be that we don't need lifelong therapy with every aspect of that, but that

we can start to back off some of those therapies, potentially some of the drug therapies. I don't want this to be a confusing message, we need prolonged administration to get these animals back to where they should be; that doesn't necessarily mean lifelong, but it does mean we need to be regularly reassessing these animals for their need for everything we are providing and whether we need anything additional. So, yes, I'm very comfortable using mAbs in younger* OA patients, but that does not necessarily mean I'm committing to lifelong continuous therapy with them.

Q Following on from the importance of sustained pain relief, how have Librelva and Solensia aided with this?



Prof Innes: These new medications have given us new things to consider, I think compliance is a really important aspect here as I believe this is one of the issues with daily medication at home. We know from studies looking at compliance with daily medications across different chronic diseases that it can be a problem. If we are going to be looking at sustained analgesia, an injectable which lasts for a month is a great way →



to drive and ensure compliance.



Prof Lascelles: I contributed to a real world study² which looked at the impact of the

introduction of Librela into first opinion practice. The first thing to note is that compliance was high, so 85 per cent of cases received their repeat monthly injections which meant those dogs getting consistent pain control, optimising the degree of improvement which can be seen.

The study also showed that the complexity of the treatment reduced – so fewer medications were needed when Librela was

introduced. Decreasing the need for add-on medications also helps with compliance.

Q Could you share insights from your recent comparative study evaluating Librela against meloxicam³?



Prof Innes: We conducted a randomised parallel-group clinical trial involving 101 dogs

recruited from general practice. The dogs were assigned to either the Librela or meloxicam treatment groups, and efficacy was assessed using the Canine Orthopedic Index, a validated client-reported outcome measure.



Q What were the key findings of the study?



Prof Innes: Both treatments demonstrated efficacy in managing OA pain, but at every time point measured, Librela showed a slightly greater reduction in pain scores compared to meloxicam, although the difference did not reach statistical significance. When examining safety however, there were differences between the two groups. Dogs treated with meloxicam experienced 17 adverse events (AE), including nine cases of gastrointestinal disorders such as vomiting and diarrhea, as well as three neurological adverse events. In contrast, three AE's were reported in the Librela group.

Q Some discussions online have raised concerns about the safety of mAbs. How should vets approach this?



Prof Lascelles: I think all of us can be affected by social media in both positive and negative directions, so when I see posts like this, they do grab my attention and do make me think. However, it's very easy on social media to blow things out of proportion so, for a particular AE that may be associated with a therapy, we need to consider: how common is it? What type of patient

does the AE appear to occur in? Is the AE really associated with the therapeutic, or a result of the patients we, as clinicians, choose to treat? What is the risk versus the benefit, in terms of improved quality of life and control of pain? It isn't about dismissing AE's, rather putting things in perspective, and understanding all aspects. Social media can very rapidly and effectively distort the truth. This is why the pharmacovigilance process is very important in educating us in terms of the types of AE's possible and how commonly they occur.

Q We have now had Librela and Solensia available to use in our OA patients since 2021, how do you see these fitting into our OA management?



Prof Lascelles: I was involved in some of the early clinical trials with the mAbs and what struck me was the efficacy was obvious, I knew we had a potentially very valuable tool coming down the line. That's what we now have, another tool in the toolbox, another first line option for managing OA pain.



Prof Innes: I did my PhD in the 1990s and I remember the excitement of the human rheumatologists about the first mAb medicine, for rheumatoid →

arthritis. But I also remember the shock of the cost/treatment, so I never thought they would come to veterinary medicine. I think it's amazing that now we have these to treat OA pain in dogs and cats at a fraction of that cost. That innovation will help millions of dogs and cats with OA, something we couldn't have dreamt of before.



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*Do not use in cats (Solensia) and dogs (Librela) under 12 months

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Managing pets' pain: education is in our own hands



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From acute trauma to medical conditions to chronic osteoarthritis (OA), pain is likely a factor for a high proportion of the cases you see every day in practice. This makes the consideration of pain important for every patient, but how do you get your clients on board?

Zero Pain Philosophy exists for the sole intention of improving pain management in veterinary patients by educating and supporting everyone involved in the caregiving of animals – particularly veterinary clinical colleagues.

Read on for some of its

recommendations to help guide your clients towards a better understanding of pain management.

“Education around pain management is certainly in the hands of us, as veterinary professionals – it is a true gift to influence animal welfare.”

Lack of caregiver understanding

The Zero Pain Philosophy 2023 Big Pain Survey clearly showed that vet professionals feel that clients have a low understanding of pain.

This is significant, as one of the key steps to improving pain management is ensuring caregivers are confident spotting and addressing pain in their pets.

The survey also highlighted some misconceptions that caregivers have around pain in their pets, which many vet professionals will no doubt be familiar with:

- “My dog is just old.”
- “My dog is slowing down.”
- “He’s not lame, so he can’t be in pain.”
- “My cat is less active because of old age.”
- “My cat is more grumpy.”

Areas that caregivers may be missing include:

- signs of chronic pain manifesting as behaviour changes
- misconceptions about adverse →

Panel 1: Clear care pathways

Objective

- Implement regular pain assessment for chronic pain cases

Key results

- Our vets, nurses and caregivers have a clear understanding of each pet’s level of pain, enabling them to make informed decisions about treatment options
- Pain assessments are recorded in the clinical record to enable continuity of care between care providers
- Caregivers book repeat appointments to enable tracking of the pain management plan

Suggestions for how to action this

- Decide which pain assessment tools are to be used for dogs and cats with chronic pain
- Train the team on use of these tools
- Audit the documentation of pain assessments and reflect on the value provided by this approach – is this helping improve our pain management for those pets?

effects of analgesics versus benefits to the vast majority of pets

- a decrease in activity in cats could be pain related.

Educating vet teams is key

Our aim at Zero Pain Philosophy is to provide the resources that vet professionals need to ensure analgesic excellence. One suggested approach to help unite the vet team in providing clear care pathways is to set an objective along with clear expected key results. How these objectives are achieved is a decision for the practice team, but some suggestions for inspiration are included in **Panel 1**.

Vet education on the topic

Be prepared when faced with clients requesting a pain trial. See Zero Pain Philosophy's free pain update.

Canine Arthritis Management offers resources for vet professionals aimed at advancing knowledge of osteoarthritis care.

- For more details, scan the QR code.



Power of social media

One frustration that the survey highlighted, and one that many vet professionals will share, is clients who value the advice of unqualified keyboard warriors. This is why it is important to seize the opportunity to educate our caregivers and open the door to being the place that clients turn to for advice. Practice social media channels can be powerful here – especially when used to positive effect by producing educational posts.

The following ideas are examples of pain awareness posts.

Idea 1 OA in dogs

Use a before and after video of an older dog who has benefited from analgesia for osteoarthritis.

Within the text of the post, include behaviours that the dog either started or stopped doing that have improved with analgesic treatment.

End the post with a question and then a clear call to action (CTA): “Does this look familiar? Ask your vet about a pain trial today.”

Idea 2 OA in cats

Source a photo of an older, sleeping cat. Within the text of the post, highlight the behaviours that painful cats often exhibit by using

Vet education on the topic

Managing pain in cats is well summarised in the International Society of Feline Medicine guidelines, which were recently reviewed in Zero Pain Reflect's recent article.

- Scan the QR code for further details.



questions. Does your cat sleep more? Can they jump to heights they used to manage easily? Does your cat groom less?

The CTA here is: "If you feel this is your cat, we can help." With a paid social media advert, you can include a button on the post that directs the client to your website to book an appointment.

Idea 3

Dental pain

This idea can be replicated for dogs and cats, and some statistics can be useful. Use a photo of a pet with dental disease – maybe not the worst mouth ever, which could deter your audience (and flag as sensitive content) – and statistics such as:

- "According to one study, 59 per cent of cats showed signs

of dental pain during an oral exam".

- "80 per cent of dogs have periodontal disease by the time they are 3 years old".
- "Dogs and cats will continue to eat despite significant dental disease".

You can choose your own statistics on this and add a CTA such as: "Book now for a free dental check."

Of course, if your practice is putting efforts into social media, it is also worth ensuring the whole practice team knows that the drive is to capture more pets in pain.

Does the client care team know to expect calls about booking these appointments? Do the nurse and vet teams have a unified approach to managing these cases when they present?

It goes back to setting those whole team objectives; success is more likely if everyone knows what is expected and why.

Client-focused pain resources

Many excellent resources are available for caregiver education about pain, many of which are also very relevant to our vet teams.

The area of OA care is particularly well supported, with a number of organisations offering free resources.



Feline OA

- International Cat Care.

For example, here is a clear description of degenerative joint disease: tinyurl.com/2znau8np

- Pharmaceutical companies that manufacture licensed analgesics for feline OA.

For example, the feline OA checklist by Zoetis is a great tool (tinyurl.com/yhhe5cww). Why not trial its use during Animal Pain Awareness Month? Start by bringing your team up to speed on these signs of OA pain

during your next clinical meeting, and the checklist can be used in a consultation or handed out to clients to take away and complete.

- Catswitharthritis.com
A website for caregivers which has some great images and a really good video on the differences between arthritic cats and normal cats in their ability to jump. These resources have the potential to really resonate with some cat caregivers and help them recognise pain in their cat.



Canine OA

- Canine Arthritis Management (CAM).

- CAM has really taken the lead in education of both the vet team and caregivers for dogs suffering with OA. The homepage of the CAM website gets straight to the point in addressing the topics that we as vet professionals really want caregivers to hear, such as: how do I know if my dog has arthritis? How can I tell if my dog is in pain? Do young dogs get arthritis? In short videos lasting one to two minutes, these questions are covered, and so are highly recommended to include in your pain management toolkit.

Be proactive about pain

Education around pain management is certainly in the hands of us, as veterinary professionals – it is a true gift to influence animal welfare.

To reach as many caregivers and pets as possible does require effort, but as shown by the suggestions in this article, many ideas exist which are easy to implement.

Importantly, they put the whole veterinary team at the centre of the pain management conversation, with the overall objective of providing analgesic excellence.

Let us know if you action some of the suggestions here by tagging @zeropainphilosophy @vettimesuk @ivapm in your social media posts.

For information about Zero Pain Philosophy and its zero-tolerance approach to pain, scan the QR code.



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References

Sparkes AH, Heiene R, Lascelles BD et al (2010). ISFM and AAEP consensus guidelines: long-term use of NSAIDs in cats. *Journal of Feline Medicine and Surgery* **12**(7): 521–538.



**Read
online
and share**



An excerpt from: **Measuring quality of life in dogs and cats with osteoarthritis.**¹

Professor Jacky Reid Honorary Senior Research Fellow, School of Biodiversity, One Health & Veterinary Medicine, University of Glasgow.

People with osteoarthritis (OA) report that the disease causes significantly lower levels of quality of life (QOL), and health-related quality of life (HRQL) data is a valuable resource for medical colleagues seeking to better understand the disease. In the UK an estimated 20-37% of dogs aged > 1 year suffer chronic pain, loss of joint function and decreased mobility because of OA and so it's not surprising that their QOL is similarly affected.

Instruments developed to measure HRQL in companion animals are owner completed structured questionnaires with a formal scoring methodology. VetMetrica's behaviour based HRQL instruments are generic instruments for dogs and cats, delivered online and completed in around 5 minutes by the pet owner. In the case of the dog a coded algorithm embedded in the VetMetrica software automatically and instantaneously transforms the owner responses to 22 items into a HRQL profile which consists of scores in 4 domains – Energetic/Enthusiastic, Happy/Content, Active/Comfortable and Calm/Relaxed. However, there may be occasions when it would be useful to consolidate the information into summary scores for

physical wellbeing (PWB) and emotional wellbeing (EWB). For the dog PWB can be calculated by averaging the Energetic/Enthusiastic and Active/Comfortable scores and EWB by averaging Happy/Content and Calm/Relaxed scores.

Interpretability is a key feature of any useful measurement scale. Users must be able readily to understand what an individual score generated by an instrument means and whether any change in a score is meaningful: is the treatment working or is the disease worsening overtime?

Various methods have been described to improve interpretability of human HRQL instruments including relating the HRQL scores to those of a specific population. In VetMetrica we have chosen to normalise HRQL scores to the healthy population of dogs and cats such that a healthy dog or cat will score 50 on a 0-70 scale and 70% of healthy dogs or cats will score above 44.8. To quantify a meaningful change we calculate the Minimal Important Difference (MID) which represents an improvement that is important to the pet owner; in the case of the dog the MID is 7 for all domains.

Below is an example of how VetMetrica's HRQL questionnaire has measured QOL in a canine osteoarthritis case:

A four-year-old male neutered Staffordshire Bull Terrier diagnosed with osteoarthritis using standard clinical practice was treated with Librela on days 0 (base- line), 28 and 56. His owner completed VetMetrica assessments on days 0, 15, 34, 51, 59 and 61.

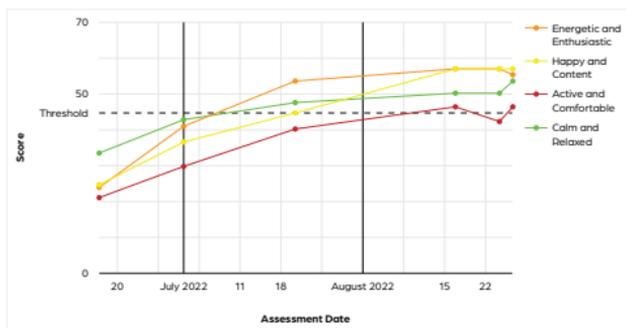


Figure 1 depicts the VetMetrica output as seen by the attending veterinary surgeon. Note the steady improvement in all domain scores over time.

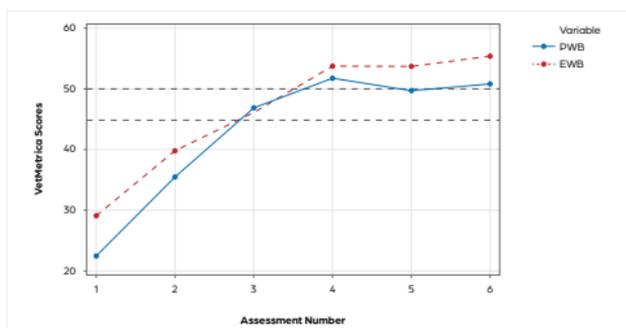


Figure 2 is a graph of the summary scores PWB and EWB. The emotional impact of disease has not been quantified in animals to date, largely because there has been no mechanism by which we can measure the emotional impact of disease. However, these data show conclusively that osteoarthritis does markedly affect the emotional health of dogs as well as their physical functioning.

In conclusion this real-world evidence confirms that osteoarthritis has a marked negative affect on the QOL of dogs which can be improved with Librela.



Companion animal pain management, with
Nuria Quesada Vicent

 Podcast



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