

Experts support continuous pain management for canine osteoarthritis

Dogs with osteoarthritis (OA) typically suffer from episodic, painful flare-ups which result in their owners rushing to the surgery, and their vets reaching for a course of NSAIDs.

However, recent changes in our understanding of the relationship between pain and osteoarthritic disease are prompting many experts to question the value of repeated, intermittent courses of pain relief for the management of OA – and to recommend continuous NSAID use instead.

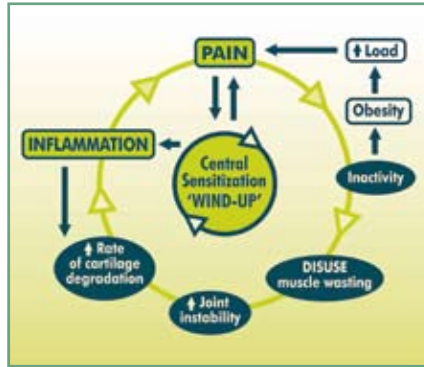
“Our understanding of joint pain is developing and changing, particularly over the last few years,” said Duncan Lascelles, Professor of Surgery at North Carolina State University.

“We are now recognising that not only do we have the joint to focus on as a source of pain, but that pain is also driving central changes and central sensitisation.”

“We now know that pain signals coming into the spinal cord actually change how the spinal cord functions and works, and that results in a facilitated state.”

This means that pain signals are amplified, making the condition even more debilitating for the dog, creating a downward spiral. There is evidence that this ‘central sensitisation’ can actually drive the progression of disease in peripheral joints. Research has shown that once it occurs, there is a general decline in mobility, muscle support and muscle function. As a result, the physical functioning, behaviour and overall quality of life of the dog are compromised.

The pain sensitisation ‘wind-up’ cycle



“One of the more recent theories about the treatment of osteoarthritic pain is that we should provide prolonged analgesic therapy to both address the joint pain that is on-going and to allow the central sensitisation to wind down and self-correct,” explained Professor Lascelles. *“Intermittent therapy never really gives the chance for central sensitisation to wind back down or to dissipate.”*

The pain associated with OA makes dogs reluctant to exercise, which in turn leads to muscle wasting and reduced support for the joint; in turn making it more unstable. Continuous NSAID treatment has the potential to break this cycle, so the dog will experience less pain and thus reap the benefits of improved mobility. It may even help to slow the long-term progression of the disease, so the dog can enjoy a better quality of life.

According to Dr John Innes, from Liverpool Veterinary School, canine OA represents a major welfare issue with an estimated 1.4 million dogs suffering from the disease in the UK alone. He also believes that the current approach to management should be reconsidered.

“A systematic review of published literature suggests that there are benefits from long-term, continuous pain relief over short-term pain relief and although the number of studies is limited, it does not highlight any safety risks,” he said.

“I think my key message for OA management is that it is all about function. We hear a lot about protecting tissues and slowing the pathology down, but actually the most important thing for the dog, and therefore the most important thing for the client, is relieving pain. If we relieve pain then function improves and the dog does not care about how its cartilage looks or how its X-rays look, it does care about how much its joint hurts. So for me pain relief is top of the agenda.”

Stuart Carmichael, Professor of Veterinary Clinical Studies, University of Glasgow agreed that an understanding of the disease process could improve management:

“I think that the main issue for veterinarians when they come to treat this disease is the fact that it has to be treated for ever. It is a disease that tends to flare up and settle down, but it is always there. It does not switch on and switch off and I think we have been guilty as pet owners in the past of paying a lot of attention when the animal has clinical signs, because we can resolve these fairly well and fairly easily, and I think it lulls us into a false sense of security. I think the big challenge is to get the momentum going and trying to work out how we can deal with this disease long term.”

Progression of OA is punctuated by episodes of severe pain

