



Anti-inflammatory Toxicity in Dogs

It goes without saying that no pet owner wishes to see their pet in pain. Fortunately veterinarians now have many very safe and effective options for managing pain of differing severities in companion animals.

Unfortunately, on occasion well meaning people administer human pain medications to their pet, aiming to relieve pain but with sometimes disastrous results for the pet.

With the cooler months upon us, there will be many older pets struggling to get moving in the morning due to pre-existing arthritis. In practice we see many patients presenting to us, especially after a really cold snap that cannot get up at all in the morning. In the short term, we would treat most of these patients with a class of drug known as non-steroidal anti-inflammatory drugs (NSAIDs).

There are many drugs under the NSAID category. Some are over the counter medicines and some are prescription only. Some of the more commonly used drugs (in people) include ibuprofen, naproxen, diclofenac and indomethacin. These are relatively safe when used correctly in people.

However, a timely reminder, dogs are not little people (and cats are not little dogs). There are differences in the way that they metabolise drugs, so that what may be fine for one species (people) could be totally inappropriate (and downright dangerous) in another (cats and dogs).

There are 2 main toxic effects these drugs have on dogs, and unfortunately most vets at one time or another would have seen a patient suffering from the toxic effects of NSAID administration.

The first, and most common toxic effect is to cause damage to the gastrointestinal tract. More specifically, these drugs can cause stomach bleeding, erosions, ulcers, and in the worst cases perforation of the stomach. Mild clinical signs can occur within 2-6 hours of the first dose. The more severe clinical signs take 12 hours to 4 days to appear.

The early mild signs may include depression, reluctance or refusal to eat, vomiting and diarrhoea. There may or may not be blood in the vomit and/or diarrhoea. These dogs usually are also suffering abdominal pain. In more severe cases there is likely to be blood in the vomit, which may be bright red or may look like coffee grounds. When there is significant bleeding from the stomach the faeces will appear black and tar-like.

If the stomach perforates, the dog will become extremely sick in a short period of time. They will go into shock and develop peritonitis (infection in the abdominal cavity). Emergency surgery would be required in this instance and the mortality rate with this condition is high.

The other potential complication that can occur with inappropriate use of painkillers and anti-inflammatories is kidney damage. Clinical signs will become apparent within 2 days of using the drug.

Whilst this is a less common potential complication, it can also be irreversible and result in kidney failure and death.

Whilst these side effects can occur with NSAID's registered for use in small animals and prescribed by your vet, they are much more likely to occur with use of drugs designed to be used in people only. Furthermore, the more severe changes such as stomach perforation are more likely to occur with drugs registered only for use in humans.

The take home message – never ever give pain or anti-inflammatory medications meant for people to your pet dogs or cats. This includes aspirin and paracetamol (especially in cats). There are rare occasions where your vet may prescribe your dog or cat aspirin, in which case you should follow the directions for administration precisely. Naturally, following your vet's advice to the letter applies for all medications!