



Guidelines for the use of Anti-inflammatory: NSAIDS

DID YOU KNOW?

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Over the past 15 years Non-Steroidal Anti-Inflammatory Drugs (NSAIDS) have revolutionized how we treat degenerative joint diseases, as well as, post-operative and traumatically induced pain. While NSAIDs have replaced steroids to a large extent, they have their own unwanted side effects, particularly in the gastrointestinal system. These drugs have been designed to target the COX (cyclooxygenase) isoenzymes preventing the production of prostaglandins, inflammatory mediators, and subsequent pain. However NSAID's also inhibit the branches of the arachidonic acid cascade (COX-1 isoenzymes) that are responsible for maintenance of normal physiologic functions such as blood flow and mucus production in the GI tract and blood flow to the kidneys. NSAIDs that favor inhibiting the COX-2 subset of enzymes (those induced by inflammation) are available, but none are 100% selective for these isoenzymes, allowing for potential injury to the gut and kidney to still occur. NSAID side effects, while relatively uncommon, do occur, and are more likely in dehydrated and debilitated animals, when medication changes are made within this class of drugs without allowing for proper withdrawal times, and when steroids and NSAIDs are combined. Below is a table showing the withdrawal times that are suggested for common NSAIDs and steroids. The suggested wash out periods are not directly related to drug half-lives but are to allow for the targeted prostaglandins to be replenished at the tissue level, therefore preventing long term inhibition COX-1 isoenzymes. We suggest utilizing these guidelines to prevent complications when making changes in treatment regimens. We also recommend that opioids be utilized during the suggested withdrawal times to ensure that pain is mitigated while making these changes and adhering to these guidelines.

Agent	Drug class	Trade name	Withdrawal time
Carprofen (oral)	NSAID	Rimadyl	2-3 days
Carprofen(inj)	NSAID	Rimadyl	1 day
Deracoxib	NSAID	Deramaxx	1-2 days
Etodolac	NSAID	Etogesic	2-3 days
Meloxicam	NSAID	Metacam	3-5 days
Tepoxalin	NSAID	Zubrin	2-3 days
Aspirin	NSAID		10-14 days
Hydrocortisone, Cortisone	Steroid		2days
Prednisone, Prednisolone, methylprednisolone	Steroid		7 days
Triamcinolone/Dexamethasone	Steroid		4 weeks
Methylprednisolone acetate	Steroid	Depomedrol	6 weeks

If you have any questions regarding these suggestions feel free to contact us. Obviously the huge number of NSAID products on the market makes it impossible to include them all in this table, however I do suggest utilizing a minimum of 3 to 5 days as a general guideline for NSAIDS not mentioned in this table.

If we can help you with your cases don't hesitate to call 24/7!!

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