

Patients medical history is reviewed prior to administering drugs and changes may be made on an individual basis,

Sedation or "Premix" given prior to anesthetic helps relax the animal.

Acepromazine is used to facilitate restraint of patients. It has anti emetic, anti spasmodic and hypothermic properties. **Adverse and Common Side effects**- Following side effects have been noted with use of acepromazine: constipation, paradoxical aggression, sinus bradycardia, depression of myocardial contractility, hypotension, collapse, and prolongation of pseudocyesis. Acepromazine lowers the seizure threshold and should not be used in animals with known seizure activity. It should not be given to animals with tetanus. Prolonged effects (even at low doses) may be seen in older animals. Giant breeds, including Greyhounds, appear quite sensitive to clinical effects of the drug, while terrier breeds seem more resistant. Boxers are predisposed to the hypotensive and bradycardic effects of the drug. Concurrent administration of atropine can counter the bradycardia. **Drug Interactions**- Acepromazine is contraindicated in animals with strychnine or organophosphate poisoning and should not be given to animals who have had succinylcholine or other cholinesterase inhibitors. Concurrent anesthetic or narcotic preparations may exacerbate CNS depression. Kaolin pectate or bismuth subsalicylate and antacids decrease the oral absorption of acepromazine. Concurrent administration of acepromazine with propranolol may increase serum levels of both. Phenytoin activity may be decreased. If used with epinephrine, could cause profound vasodilation and tachycardia. Other CNS depressants may enhance hypotension and respiratory depression. Barbiturate drugs increase the metabolism of phenothiazines and may reduce their effects. Barbiturate anesthetics may increase excitation (tremor, involuntary muscle movements) and hypotension. In humans, there has been the unexplained possibility of sudden death when used concurrently with phenylpropanolamine.

Dexdetomidine is a synthetic alpha₂-adrenoceptor agonist with sedative and analgesic properties. **Animal safety**- Dexmedetomidine should not be administered in the presence of pre-existing hypotension, hypoxia, or bradycardia. Due to the pronounced cardiovascular effects of dexmedetomidine, only clinically healthy dogs and cats (ASA classes I and II) should be treated.

Contraindications- Do not use DEXDOMITOR in dogs or cats with cardiovascular disease, respiratory disorders, liver or kidney diseases, or in conditions of shock, severe debilitation, or stress due to extreme heat, cold or fatigue.

Precautions- Apnea may occur with dexmedetomidine use. In the event of apnea, additional oxygen should be supplied. Adverse reaction reports for dexmedetomidine in cats include rare events of severe dyspnea and respiratory crackles diagnosed as acute pulmonary edema. Dyspnea due to the delayed onset of pulmonary edema could develop in rare instances up to three days after dexmedetomidine administration. Some of these acute and delayed pulmonary edema cases have resulted in death although this was not observed in the feline clinical field studies with dexmedetomidine. Reported side effects in dogs in small numbers of cases include: Auscultated unidentified arrhythmias, Severe bradycardia requiring treatment, Apnea requiring treatment, Severe hypothermia requiring treatment and Prolonged recovery.

Alfaxalone- Intravenous injectable anesthetic for use in cats and dogs.

Warnings- When anesthetized using Alfaxan®, patients should be continuously monitored, and facilities for the maintenance of a patent airway, artificial ventilation, and oxygen supplementation must be immediately available. Rapid bolus administration or anesthetic overdose may cause cardiorespiratory depression, including hypotension, apnea, hypoxia, or death. Arrhythmias may occur secondary to apnea and hypoxia.

Adverse reactions- The primary side effects of alfaxalone are respiratory depression (apnea, bradypnea, hypoxia) and cardiovascular derangements (hypertension, hypotension, tachycardia, bradycardia). Other adverse reactions observed in clinical studies include hypothermia, emesis, unacceptable anesthesia quality, lack of effectiveness, vocalization, paddling, and muscle tremors.

Propofol- Intravenous anesthetic.

Contraindications- do not use in animals with known hypersensitivity to propofol or under any circumstance where general anesthesia or sedation is contraindicated.

Cautions- Cardiorespiratory depression, notably apnea, hypotension and oxygen desaturation may occur following propofol administration. These effects are usually transient.

Continuous monitoring is necessary for the above and for potential rapid arousal. The use of preanesthetics may reduce the amount of propofol needed or result in more profound changes in blood pressure. Exercise caution when using in animals with cardiac, respiratory, renal or hepatic impairment. Doses may need to be adjusted downwards for premedicated geriatric animals or severely debilitated animals. Recovery to sternal may be delayed by about 10 minutes in sighthounds compared to other breeds. Effects on fertility and reproductive function have not been evaluated. Propofol crosses the placenta and may result in neonatal depression. Propofol has not been evaluated for use in pets under 10 weeks of age.

Adverse reactions reported- lack of efficacy, death, prolonged recovery, cyanosis, pyrexia, bradycardia, cardiac arrest, arrhythmia, hypotension, tachycardia, apnea, tachypnea, dyspnea, muscle tremors, paddling, seizures, hypertonia, nystagmus, opisthotonus, anaphylactic reactions, facial edema, urticarial.

No pharmacological incompatibility has been observed.

Isoflurane- is an inhalant anesthetic. It is well tolerated in debilitated patients and those with hepatic or renal impairment. **Adverse and Common Side Effects-** dose-dependant cardiac and respiratory depression occurs. Hypotension, respiratory depression, arrhythmias, nausea, vomiting and post operative ileus have been reported.

Metacam- A non-steroidal anti-inflammatory (NSAID) given post operatively for pain. **Contraindications-** Should not be administered if gastric or intestinal bleeding is suspected, if there is evidence of cardiac, hepatic or renal disease or evidence of hemorrhagic disorders or individual sensitivity to the product. Do not administer concurrently with other steroidal or non-steroidal anti-inflammatory (NSAIDs). Safety has not been established for breeding, lactating or pregnant animals. Particular care must be taken with regards to dosing in cats. Cats have been shown to be much more sensitive to NSAIDs than dogs. Repeat dosing of the injectable form in cats should NOT be undertaken and has been associated with acute renal failure and death. Repeat usage of the label dose of the oral form is appropriate, but also with caution and should be discontinued if any signs of decreased appetite or gastrointestinal upset are noted and your veterinarian should be contacted immediately. **Adverse Effects-** based on case reports, the most important body systems affected, in order, are the GI tract (vomiting, diarrhea, ulceration, inappetance), central nervous system/behaviour (ataxia, seizures, blindness, depression, hyperactivity, trembling), renal (elevated creatinine and BUN, acute kidney failure) and dermatological system (itchiness, eczema, focal hairloss, hot spots). Acute allergic reactions/anaphylaxis have also been reported. In rare cases, side effects have been severe enough to cause death.