

Fear FreeSM

In-Hospital Pharmaceuticals



Class & Action: Sedatives

DRUG	DOSAGE	ADVANTAGES	DISADVANTAGES	NOTES	CONTRAINDICATIONS
acepromazine	Dog: 0.01-0.03 mg/kg IV or IM (up to 0.2 mg/kg IM); Cat: 0.03- 0.05 mg/kg IV or IM (up to 0.2 mg/kg IM); these dosages can be used alone or in combination with alpha-2 agonists or benzodiazepines	mild to moderate sedation that lasts several hours; can be given orally or transmucosally but higher (see transmucosal chart for more information) doses will be required & onset of effects are slow	only mild to moderate sedation; not anxiolytic; not analgesic; not reversible; duration may be longer than desired; effects not predictable from one patient to another	If anxiolysis rather than sedation is required, a benzodiazepine should be added to the protocol	no absolute contraindications but use with caution in patients with hepatic disease, clotting dysfunction, or hypotension; recent evidence proves that acepromazine does NOT cause seizures
alfaxalone	Cats & Small Dogs: 0.5-1.0 mg/kg IM, PLUS Opioid Mild pain: 0.2-0.4 mg/kg butorphanol, 0.02-0.03 mg/kg buprenorphine IM or IV	can be administered IM as part of sedation protocols, particularly in cats and small dogs; less cardiac effects than alpha-2 agonists; shorter duration than acepromazine	no reversal agent, no analgesia; volume limits IM administration to small patients (cats and small dogs); must combine with other sedatives and/or analgesic drugs to avoid rough inductions and recoveries	alfaxalone is primarily used as an IV induction drug but can be used as part of a sedation protocol; sedation level is generally light to moderate; commonly administered with opioids	no absolute contraindications

Class & Action: Alpha-2 agonists; Sedative-analgesics

DRUG	DOSAGE	ADVANTAGES	DISADVANTAGES	NOTES	CONTRAINDICATIONS
dexmedetomidine	<p>for light to moderate sedation: Dog: 1.0-3.0 microg/kg IV or 3.0-10.0 microg/kg IM; Cat: 1.0-5.0 microg/kg IV or 5.0-15.0 microg/kg IM; for profound sedation: Dog- 8.0-28.0 microg/kg IV or 12-40 microg/kg IM; Cat-20-40 microg/kg IM; DECREASE DOSAGES IF USED WITH OPIOIDS; use low end of dosing range for older patients, low level of FAS, & when used with opioid; high end range for younger patients, higher level of FAS or when used solo</p>	<p>rapid onset; can be given IM; titratable sedation from mild to profound; decrease stress; provide analgesia & sedation; reversible</p>	<p>cardiovascular effects including hypertension and increased cardiac work due to vasoconstriction; patient can suddenly react to painful stimulus even when deeply sedated</p>	<p>most predictable effects when used in combination with other drugs to avoid sudden arousal; generally the best drugs for patients exhibiting moderate to profound FAS and/or aggression; the dosages in this chart are based on FDA approved dosages however there are no FDA approved IV dosages for cats; see the product insert for more information</p>	<p>do not use in patients with cardiovascular disease</p>
medetomidine	<p>Dosages are exactly double the microg/kg dexmedetomidine dosages</p>				

Class & Action: **Benzodiazepines; Anxiolytic**

DRUG	DOSAGE	ADVANTAGES	DISADVANTAGES	NOTES	CONTRAINDICATIONS
midazolam	Dog or Cat: 0.1 -0.2 mg/kg IM or IV	injectable; fast acting; minimal to no adverse physiologic effects; enhance calming when used in combination with true sedatives; midazolam can be given IM	reversal may cause arousal in some; not potent sedation; may not be not effective if patient is already exhibiting FAS and/or aggression; possible paradoxical excitation	due to possible paradoxical excitation, use in combination with a true sedative for those exhibiting FAS and/or aggression	none
diazepam	Dog or Cat: 0.1-0.2 mg/kg IV only				

Class & Action: **Opioids; Analgesics**

DRUG	DOSAGE	ADVANTAGES	DISADVANTAGES	NOTES	CONTRAINDICATIONS
butorphanol; buprenorphine	Low Pain butorphanol Dog & Cat- 0.2-0.4 mg/kg IM or IV; buprenorphine Dog & Cat- 0.02-0.03 mg/kg IM or IV	mild to potent analgesia depending on the drug; wide safety margin; fast onset except buprenorphine;	may cause vomiting; slow GI motility; decrease in respiratory function with inhalant anesthesia; more potent opioids may cause excitement in cats	combine with a sedative to avoid excitement in cats; with mild pain use butorphanol or buprenorphine; with moderate to severe pain use hydromorphone, methadone, or morphine	no absolute contraindications; use with caution in patients in which vomiting would be detrimental; use with caution in patients with existing respiratory depression
hydromorphone; methadone; morphine	High Pain hydromorphone: Dog- 0.1-0.2 mg/kg IM or IV; Cat- 0.1 mg/kg IM or IV; methadone: Dog- 0.3-0.5 mg/kg IM or IV; Cat- 0.3 mg/kg IM or IV; morphine: Dog- 0.3-1.0 mg/kg IM; Cat- 0.1-0.3 mg/kg IM	reversible; many to choose from; variety of routes of administration; synergistic with sedatives			

Class & Action: Dissociative anesthetic drugs; Immobilizers

DRUG	DOSAGE	ADVANTAGES	DISADVANTAGES	NOTES	CONTRAINDICATIONS
ketamine	<p>Dog & Cat: 1.0-2.0 mg/kg IM when used in combination with a sedative may provide dissociation without anesthesia while the same dose IV will provide light anesthesia; 5.0-10.0 mg/kg IM for true anesthesia; IM good route for cats; volume at this dose may be too high for large sized dogs</p>	<p>decrease CNS response to circulating neurotransmitters in those already exhibiting FAS and/or aggression; decreases incidence of sudden arousal to stimulus</p>	<p>administration can produce anesthesia so patients should be monitored; duration may be longer than desired; not reversible; ketamine is painful on injection; prolonged, rough recoveries are possible with tiletamine-zolazepam, especially in dogs</p>	<p>cleared by the liver & kidneys</p>	<p>no absolute contraindications; use with caution in patients with sympathetically driven cardiac arrhythmias or seizures; use with caution in patients with diagnosed hepatic or renal disease</p>
tiletamine-zolazepam	<p>Dog & Cat: 1.0-2.0 mg/kg IM</p>				

Pharmaceutical Use and Owner Consent

Not all of the drugs in these charts are FDA-approved for use in dogs and cats. Drugs like the alpha-2 agonists and acepromazine are often used at **lower** than the FDA-approved dose as profound sedation is not always necessary. However, all of the dosages in this chart are commonly used in practice and are referenced in the veterinary literature.

The AVMA Policy on Owner Consent states that veterinarians or staff should provide sufficient information in a form and manner that enables owners or their authorized agents to make appropriate decisions when choosing the veterinary care provided. An assessment of risks and benefits of recommended treatments should be provided. In response owners or their authorized agents should indicate:

- Their questions have been answered to their satisfaction
- The information received by them has been understood
- They are consenting to the recommended treatments

The consent can be verbal or written and should be documented in the medical record by the veterinarian or staff member.

Taken from the AVMA Policy on Owner Consent in Veterinary Medicine. You should review the complete policy here:
<https://www.avma.org/KB/Policies/Pages/Owner-Consent-in-Veterinary-Medicine.aspx>