Sedative, Anesthestic& Euthanizing Drugs

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| Drugs | Classification | Trade name | Route of Administration | Indications | Contra-indications | Major drug interaction | Dosage |
| Thiopental 1g | General anaesthetic  (barbiturate) | Thiopental  (thiopentone 1g) Injection B.P. | Intravenous | -induction of general anaesthesia | -absence of suitable veins for IV admin  -drug hypersensitivity  -status asthmaticus  -severe cardiovascular disease/preexisting ventricular arrhythmias, shock  -increased intracranial pressure, myasthenia gravis | Concurrent use of barbiturates and benzodiazepines may result in additive respiratory depression. | Equines-w/ pre-anaesthetic , 6-13mg/kg bw  w/o preanaesthetic 9-15.5mg/kg)  Bovines 136 kg and over: 8.2-15.4 mg/kg |
| Natrium Pentobarbital | Barbiturate | Natrium Pentobarbital 20% (Nembutal) | IV, IP, IM | -Induction of anaesthesia followed by inhalation anaesthesia and general anaesthesia in dogs  -Euthanasia | drug hypersensitivity  -hypovolaemic, anemic, cardiac and resp disease, nephritis, severe resp disease, severe liver disease | -Acetaminophen increases risk of hepatotoxicity | Induction of anaesthesia- 30mg/kg b.w., IV, or IP  Prolong narcosis- 5mg/kg bw IV every hr  When premedicated with sedative, reduce dose 50% or more |
| Bupivacaine | Local Anaesthetic (Amino amide) | Bupivacaine 0.5% | Epidural, intraarticular | -nerve block, caudal and cranial epidural anaesthesia | Iinflamed/infected tissue, damaged skin |  |  |
| Xylazine | Sedative, analgesic, muscle relaxant (α2-agonist) | Xylazin 2% | IV, parenteral administration in dogs, cats, horses, cattle, goats and swine | -dose-dependent sedation and analgesia  -premedication for surgery | Shock, cardiac incompetence, late pregnancy-may cause premature parturition, severe resp depression, animals receiving epinephrine/ having ventricular arrythmias | -Used with Acepromazine-generally safe, potential for hypnotic effect  -Chloramphenicol-prolonged sedation and GI stasis  -CNS depressant agent may lead to additive CNS depression | Horses 1.1 mg/kg IV  Sheep and goats: 0.01mg/kg IV |
| Xylazine | Sedative, analgesic, muscle relaxant (α2-agonist) | Xylaze 100 | IM/IV | -analgesic, sedative and muscle relaxant for use in horses and deer | Shock, cardiac incompetence, late pregnancy, severe resp depression | Used with Acepromazine-generally safe, potential for hypnotic effect  -Chloramphenicol-prolonged sedation and GI stasis  -CNS depressant agent may lead to additive CNS depression | Horse- 0.65-1.1ml/ 100kg Slow IV  Deer-0.1-1.6ml/40kg IM or IV depending on species and route. Anterior half of neck in food animals |
| Lidocaine | Local anaesthetic | Lidocaina (over) 2% | IM, epidural | -Infiltration anaesthesia or nervous blockade  -Epidural anaesthesia (large animals)- lower part 3-20ml according to size, upper part 20-120ml according to size  Small anmals- 1ml every 2.5 k.l.w. | -drug hypersensitivity  -serious hepatic/ cardiac damage  -Drug hypersensitivity | Antiarrythmias- may cause additive or antagonistic cardiac effects and enhanced toxicity |  |
| Sodium Pentobarbitone | Sedative,hypnotic, anaesthetic | Pentobarbital sodium | Oral | For procedural sedation for use as preanesthetic medication  For use as an alternative agent in treatment of status epilepticus | CNS depression  Not for use in pregnant of nursing animals  Not to use in patients with anemia, addisons disease, lung or heart disease | Increased risk of low blood pressure if used with furosemide  Effect may be increased if used with phenobarbital or other CNS depressants  May change metabolism of phenytoin |  |