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Addendum.
Recommended Deep Sedation Drugs and Doses: Pediatric and Neonatal

Doses exceeding recommended ranges are documented in the patient's chart. May only be performed by those physicians with current credential in Pediatric Anesthesiology or Pediatric Critical Care, and/or verification of education, training, and experience supporting the granting of these privileges. Sedation medication may be administered by a qualified RN if the credentialed physician is physically present during the administration, and the medication is administered after the physician orders it and the RN verbally confirms the order.

DRUG	RECOMMENDED IV SEDATIVE DOSE	ONSET OF ACTION (min)	DRUG EFFECTS	REVERSAL AGENT
Propofol (Diprivan)	25-75 mcg/kg/minute; initiate at 15 mcg/kg/minute with increments of 5 mcg/kg/minute every 5 minutes until sedated or a max dose of 50 mcg/kg/min. Maintain infusion at dose that achieves sedation.	Within 1 minute; short duration of action. After discontinua-tion, recovery occurs in 10-15 minutes.	After stopping infusion, patients are generally awake & responsive to verbal commands within 8 minutes. Dose-related increases in sedation & respiratory depression. Dose-related amnesia evident at greater than 17 mcg/ kg/minute. Hypotension occurs in 26% No analgesic activity. Opioids interact synergistically & markedly reduce the dose of propofol.	None
Ketamine	1 mg/kg IV. Repeated doses of 0.5 mg/kg can be administered for inadequate sedation to a maximum total dose of 2 mg/Kg. 4-5 mg/kg/dose IM. May repeat 0.5-1 mg/kg/dose if sedation 6 mg/kg PO. Administration with midazolam may decrease dose requirement & to reduce potential for hallucinations & withdrawal phenomena.	IV dosing: Sense of dissociation occurs in 15 seconds & deep sedation occurs within 30 seconds. IM dosing: Onset of sedation 3-5 minutes, may repeat 0.5-1mg/kg/dose after 10 minutes if initial sedation inadequate Duration 15-60 minutes	Increases salivary and tracheal-bronchial secretions and usually does not suppress pharyngeal and laryngeal reflexes. Respiratory depression & apnea have been reported & are more likely to occur following rapid administration or high doses (high peak effect). Analgesic action (mu-receptor activity) is dose-related. Increases BP, HR, and cardiac output (blunted by prior benzodiazepine use). CNS and psychological adverse effects occurs in 12% of patients (visual hallucinations, nightmares or illusions, and post-anesthesia emergence delirium often consisting of dissociative/ floating sensations). Occurs more frequently in patients 15 to 45 years of age & typically last only a few hours. Outpatients should not be released until recovery is complete, and they should be accompanied by an adult.	None
Etomidate (Amidate)	5-8 mcg/kg/minute IV Children, rectal: 6.5 mg/kg	Within 1 minute; duration of action is 10 minutes.	Useful for hemodynamically unstable patients; has minimal effects on ventilation & cardiovascular function. Use with fentanyl allows for lower dosage & earlier awakening. Hiccups or coughing incidence similar to methohexital; 30-40% nausea/vomiting; pain on injection; **myoclonus** (reduced by premedication with opioid or benzodiazepine).	None
Opioids, in combination with the above medications	1-3 mcg/kg fentanyl over 1-2 min.	Within 1 minute	Maximal respiratory depression at 5-10 minutes and may last for greater than 1 hr; dose easily titrated to effect. Exhibits minimal hypnotic action; histamine release rarely occurs.	Naloxone (Narcan) 0.01 mg /Kg IV q 2-3 minutes until respirations adequate for age or max of 0.1 mg/Kg

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