Update date: February 1, 2024

Group No. 2: Anesthesia

ATROPINE

Clue	Description	Indications	Route of administration and dosage
010.000.0204.00	INJECTABLE SOLUTION Each vial contains: Atropine sulfate 1 mg. Container with 50 vials with 1 mL.	Pre-anesthesia. Cardiac arrhythmias. Bradycardia. AV block.	Intramuscular or intravenous. Adults: 0.5 to 1 mg. Maximum dose 2 mg. Children: 0.01 mg/kg body weight every 6 hours. Preanesthesia: 0.01 mg/kg body weight, 45 to 60 minutes before anesthesia. Maximum dose 0.4mg.

Generalities

Anticholinergic alkaloid that competes on muscarinic receptors, selectively antagonizing the effects of acetylcholine and muscarinic medications.

Risk in Pregnancy

c

Adverse effects

Tachycardia, mydriasis, dry mucous membranes, blurred vision, excitement, mental confusion, constipation, urinary retention and urticaria.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, glaucoma, bladder obstruction, ulcerative colitis, paralytic ileus and myasthenia gravis.

Interactions

Increases the antimuscarinic actions of antidepressants, antihistamines, meperidine, phenothiazines, methylphenidate and orphenadrine. Decreases the action of pilocarpine. Vitamin C promotes the elimination of atropine.

LIDOCAINE

Clue	Description	Indications	Route of administration and dosage
010.000.0261.00	1% INJECTABLE SOLUTION Each vial contains: Lidocaine Hydrochloride 500 mg. Container with 5 vials of 50 mL.	Local anesthesia. Caudal epidural anesthesia. Regional anesthesia. Ventricular arrhythmia (extrasystoles, tachycardia, fibrillation, ectopia).	Intravenous. Adults: Antiarrhythmic: 1 to 1.5 mg/kg/dose administered slowly. Maintenance: 1 to 4 mg/min. Only administer diluted in intravenous solutions packaged in glass bottles. Infiltration. Children and adults: Maximum dose 4.5 mg/kg body weight or 300 mg. Caudal or epidural anesthesia of 200 to 300 mg. Regional anesthesia from 225 to 300 mg. Do not repeat the dose within 2 hours.
010.000.0262.00	2% INJECTABLE SOLUTION Each vial contains: Lidocaine Hydrochloride 1 g. Container with 5 vials with 50 mL.		
010.000.0264.00	10% SOLUTION Each 100 mL contains: Lidocaine 10.0 g. 115 mL container with manual spray bottle.		Local. Apply to the region, according to the specialist doctor's indication.

Generalities

Local anesthetic that blocks nerve conduction by interfering with the exchange of sodium and potassium across the cell membrane.

Risk in Pregnancy

b

Adverse effects

Hypersensitivity reactions, nervousness, drowsiness, paresthesias, convulsions, pruritus, local edema and erythema.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug. Arterial hypotension. Septicemia. Inflammation or infection at the application site.

Interactions

Adverse effects increase with nervous system depressants. With opioids and antihypertensives, arterial hypotension and bradycardia occur. With other antiarrhythmics, their effects on the heart increase or decrease. Cardiac arrhythmias can occur with inhaled anesthetics.

LIDOCAINE, EPINEPHRINE

Clue	Description	Indications	Route of administration and dosage
010.000.0265.00	2% INJECTABLE SOLUTION Each vial contains: Lidocaine hydrochloride 1 g. Epinephrine (1:200000) 0.25 mg. Container with 5 vials with 50 mL.	Local anesthesia. Epidural and caudal anesthesia. Regional anesthesia.	Infiltration. Adults: 7 mg/kg body weight or 500 mg. Do not repeat the dose within 2 hours.
010.000.0267.00	2% INJECTABLE SOLUTION Each dental cartridge contains: Lidocaine hydrochloride 36 mg Epinephrine (1:100000) 0.018 mg Container with 50 dental cartridges with 1.8 mL.	Dental anesthesia.	Infiltration. Adults and children: 20 to 100 mg.

Generalities

Local anesthetic that blocks nerve conduction by interfering with the exchange of sodium and potassium across the cell membrane. Its effect is prolonged when combined with epinephrine.

Risk in Pregnancy b

Adverse effects

Hypersensitivity reactions, nervousness, drowsiness, paresthesias, convulsions, pruritus, local edema and erythema.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, shock states, arterial hypotension, septicemia, inflammation or infection at the application site, administration at vascular endings (fingers, ears, nose and penis).
Precautions: Not recommended for children under 2 years of age.

Interactions

With central nervous system depressants, their adverse effects increase. Opioids and antihypertensives cause arterial hypotension and bradycardia. Cardiac arrhythmias may occur with inhaled anesthetics.

BUPIVACAINE

Clue	Description	Indications	Route of administration and dosage
010.000.0271.00	INJECTABLE SOLUTION Each mL contains: Bupivacaine Hydrochloride 5 mg. Container with 30 mL.	Epidural and caudal anesthesia Local anesthesia.	Infiltration. Adults and children over 12 years of age: Caudal anesthesia: 75 to 150 mg repeat every 3 hours according to the anesthetic procedure. Regional anesthesia 25 to 50 mg. The single dose should not exceed 175 mg and the total dose 400 mg/day.

010.000.4055.00	INJECTABLE SOLUTION Each vial contains: Bupivacaine Hydrochloride 15 mg. Anhydrous dextrose or anhydrous glucose 240 mg. or Glucose monohydrate equivalent to 240 mg of anhydrous glucose. Container with 5 vials with 3 mL.	Local anesthesia. Subarachnoid block.	Local or subarachnoid infiltration. Adults and children over 12 years of age: Initial dose of 10 to 15 mg. Subsequent dose according to patient's weight and height. Each dose should not exceed 175 mg and the total dose 400 mg/day.

Generalities

Local anesthetic that blocks nerve conduction by interfering with the exchange of sodium and potassium, through the cellular membrane.

Risk in Pregnancy C

Adverse effects

Allergic reactions, nervousness, dizziness, blurred vision, seizures, unconsciousness, arterial hypotension and cardiac arrhythmias.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, myasthenia gravis, epilepsy, arrhythmias, heart or liver failure.

Interactions

High blood pressure is favored with antidepressants. With inhaled anesthetics, the risk of arrhythmias increases.

CISATRACURIUM, BESILATE

Clue	Description	Indications	Route of administration and dosage
010.000.4061.00	INJECTABLE SOLUTION Each mL contains: Besylate cisatracurium equivalent to 2 mg cisatracurium Container with 1 vial with 5 mL.	Neuromuscular relaxation. Intravenous.	Adults: Induction 0.15 mg/kg body weight, maintenance: 0.03 mg/kg body weight. Children: Induction: 0.1 mg/kg body weight, maintenance: 0.02 mg/kg body weight. Administer diluted in intravenous solutions packaged in glass bottles.

Generalities

Non-depolarizing skeletal muscle relaxant of intermediate duration, which acts as an antagonist of the nicotinic cholinergic receptors of the neuromuscular plate.

Risk in Pregnancy C

Adverse effects

Skin rash, flushing, bradycardia, hypotension, bronchospasm and anaphylactic reactions.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, atracurium or benzenesulfonic acid.

Interactions

Inhalational anesthetics, aminoglycosides, clindamycin, lincomycin, propranolol, calcium channel blockers, procainamide and furosemide increase its effect. Phenytoin and carbamazepine reduce its effect.

DESFLURAN

Clue	Description	Indications	Route of administration and dosage
	LIQUID Each container contains:	Induction and maintenance of general anesthesia.	Inhalation. Adults:

010.000.0234.00	Desflurane 240 mL. Container with 240 mL.		2-12%

Generalities

General anesthetic that produces a loss of consciousness and pain sensations and allows rapid recovery.

Risk in Pregnancy d

Adverse effects

Respiratory depression, arterial hypotension, bradycardia or tachycardia, agitation, tremor, nausea and vomiting.

Contraindications and Precautions

Contraindications: Hypersensitivity to halogenated anesthetics, history of malignant hyperthermia and renal failure.

Interactions

With aminoglycosides, neuromuscular blockade increases. With antihypertensives, arterial hypotension increases. Enhances the action of central nervous system depressants.

DIAZEPAM

Clue	Description	Indications	Route of administration and dosage
040.000.0202.00	INJECTABLE SOLUTION Each vial contains: Diazepam 10 mg. Container with 50 2 mL vials.	Preanesthetic medication. Sedation. Anxiety. Convulsive syndrome. Striated muscle contracture.	Intramuscular or intravenous. Adults: 0.2 to 0.3 mg per kg of body weight. Children weighing more than 10 kg bodily: 0.1 mg per kg of body weight. Single dose. Administer diluted solutions in IVs packaged in glass bottles.

Generalities

Long-acting benzodiazepine that produces varying degrees of depression, from sedation to hypnosis.

Risk in Pregnancy d

Adverse effects

Respiratory failure, cardiac arrest, urticaria, nausea, vomiting, excitement, hallucinations, leukopenia, liver damage, phlebitis, venous thrombosis and dependence.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, glaucoma, myasthenia gravis, children under 10 kg body weight, pregnancy, shock. Use of other central nervous system depressants. Elderly and seriously ill patients and kidney failure.

Interactions

Enhances the effect of coumarins and antihypertensives. With disulfiram and tricyclic antidepressants, the effect of diazepam is enhanced.

ephedrine

Clue	Description	Indications	Route of administration and dosage
040.000.2107.00	INJECTABLE SOLUTION Each vial contains: Ephedrine sulfate 50 mg. Container with 100 vials with 2 mL. (25 mg/ mL).	Arterial hypotension. Acute bronchospasm during anesthesia.	Intramuscular, intravenous or subcutaneous. Adults: Bronchospasm: 12.5 to 25 mg. Hypotension: Intramuscular or subcutaneous 25 to 50 mg. Slow intravenous 10 to 25 mg. Maximum dose: 150 mg/day. Children: Intravenous 100 mg/m2 body surface or subcutaneous 3 mg/kg body weight/day; divide for every 6 hours. Administer diluted in intravenous solutions packaged in glass bottles.

Generalities

Bronchodilator with adrenergic activity on ÿ and ÿ receptors and release of norepinephrine from the sites of storage.

Risk in Pregnancy

c

Adverse effects

Insomnia, delirium, euphoria, nervousness, tachycardia, systemic arterial hypertension, urinary retention and dysuria.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, coronary vascular disease, cardiac arrhythmias, cerebral atherosclerosis, glaucoma and porphyria.

Interactions

Systemic arterial hypertension can occur with antidepressants. With digitalis and halogenated anesthetics, the risk of ventricular arrhythmias increases. With antihypertensives its effect decreases.

ETOMIDATE

Clue	Description	Indications	Route of administration and dosage
040.000.0243.00	INJECTABLE SOLUTION Each vial contains: Etomidate 20 mg. Container with 5 vials with 10 mL.	Anesthetic induction.	Intravenous. Adults and children over 10 years old: 0.2 to 0.6 mg/kg body weight. Administer diluted in solutions IVs packaged in glass bottles.

Generalities

Short-term hypnotic that decreases the activity of the ascending reticular system.

Risk in Pregnancy

c

Adverse effects

Myoclonus, pain at the injection site, respiratory depression, arterial hypotension, cardiac arrhythmias and seizures.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, during obstetric anesthesia and patients in critical condition.

Interactions

With sedative preanesthetic medications, the hypnotic effect increases.

FENTANYL

Clue	Description	Indications	Route of administration and dosage
040.000.0242.00	INJECTABLE SOLUTION Each vial or vial contains: Fentanyl citrate equivalent to 0.5 mg of fentanyl. Container with 6 vials or vials with 10 mL.	General or local anesthesia. Moderate intensity pain during surgery.	Intravenous. Adults: 0.05 to 0.15 mg/kg body weight. Children: Initial dose: 10 to 20 µg/kg body weight. Maintenance dose at the discretion of the specialist. Administer diluted in intravenous solutions packaged in glass bottles.

Generalities

Opioid analgesic with agonist activity on µ and ÿ receptors. It produces a state of deep analgesia and unconsciousness.

Risk in Pregnancy

c

Adverse effects

Respiratory depression, vomiting, muscle rigidity, euphoria, bronchoconstriction, orthostatic hypotension, miosis, bradycardia and seizures.

Contraindications and Precautions

Contraindications: Hypersensitivity to opioids, head trauma, intracranial hypertension and respiratory dysfunction.

Interactions

With benzodiazepines it causes respiratory depression. Monoamine oxidase inhibitors potentiate the effects of fentanyl.

FLUMAZENIL

Clue	Description	Indications	Route of administration and dosage
040.000.4054.00	INJECTABLE SOLUTION Each vial contains: Flumazenil 0.5 mg. Container with a vial with 5 mL (0.1 mg/ mL).	Intoxication and other effects adverse effects from benzodiazepines.	Intravenous. Adults: 0.5 to 1 mg, every 3 minutes. Maximum dose: 5 mg. Administer diluted intravenous solutions packaged in glass vials.

Generalities

Competitive antagonist of benzodiazepines.

Risk in Pregnancy

d

Adverse effects

Nausea, vomiting, tachycardia and anxiety.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, head trauma or *status epilepticus* receiving treatment with benzodiazepines.

Interactions

Promotes the effects of tricyclic antidepressants (seizures and cardiac arrhythmias).

FLUNITRAZEPAM

Clue	Description	Indications	Route of administration and dosage
	INJECTABLE SOLUTION Each vial contains: Flunitrazepam 2 mg.	Anesthetic induction. Sedation.	Intramuscular or intravenous. Older adults: 10 to 20 µg/kg body weight.
040.000.0206.00	Container with 3 vials and 3 vials with diluent.		Adults: 15 to 30 µg/kg body weight.
040.000.0206.01	Container with 5 vials and 5 vials with diluent.		Children: Newborns 70 µg/kg. Children under 2 years: 70 to 80 µg/kg body weight. From 2 to 6 years: 80 to 100 µg/kg of body weight. From 6 to 12 years: 40 to 50 µg/kg of body weight. Administer diluted in intravenous solutions packaged in glass bottles.

Generalities

Benzodiazepine that produces all degrees of depression of the central nervous system. Its mechanism of action is due to the stimulation of GABAergic receptors.

Risk in Pregnancy

x

Adverse effects

Drowsiness, blurred vision, dizziness, paresthesias, nausea, vomiting and arterial hypotension.

Contraindications and Precautions

Contraindications: Hypersensitivity to benzodiazepines, myasthenia gravis. Respiratory, cardiac, hepatic and renal insufficiencies. During pregnancy and lactation.

Interactions

Synergism with morphine derivatives. Excessive depression of the central nervous system with alcohol or other depressants of the central nervous system.

ISOFLURANE

Clue	Description	Indications	Route of administration and dosage
	LIQUID OR SOLUTION Each container contains: Isoflurane 100 mL.	induction and maintenance of general anesthesia.	Inhalation. Adults: Induction with 0.5%.
010.000.0232.00	Container with 100 mL.		Surgical anesthesia 1.5 to 2%. Maintenance: 0.5 to 2.5%. Children: 1.5%.

Generalities

General anesthetic that produces rapid loss of consciousness, with gentle adjustment of anesthetic depth and rapid recovery.

Risk in Pregnancy

d

Adverse effects

Nausea, vomiting, headache, arterial hypotension and respiratory depression.

Contraindications and Precautions

Contraindications: Hypersensitivity to inhaled anesthetics, history of malignant hyperthermia and myasthenia gravis.

Interactions

With aminoglycosides, clindamycin, lincomycin, neuromuscular blockade is increased. With central nervous system depressants, their depressant effect increases. With antihypertensives, the hypotensive effect increases.

KETAMINE

Clue	Description	Indications	Route of administration and dosage
040.000.0226.00	INJECTABLE SOLUTION Each vial contains: Ketamine hydrochloride equivalent to 500 mg of ketamine. Package with a 10 mL vial.	Induction of anesthesia general.	Intravenous or intramuscular. Adults and children: Intravenous: 1 to 4.5 mg/kg body weight. Intramuscular: 5 to 10 mg/kg body weight. Administer diluted in intravenous solutions packaged in glass bottles.

Generalities

It inhibits association pathways in the brain, producing somatic sensory blockade.

Risk in Pregnancy

C

Adverse effects

Arterial hypertension, nystagmus, tonic and clonic movements, athetotic movements, sialorrhea, diaphoresis, hallucinations and confusion.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, glaucoma, intraocular surgery, neuropsychiatric conditions, toxemia, intracranial hypertension, coarctation of the aorta, cerebrovascular diseases and heart failure.

Interactions

With thyroid hormones, hypertension and tachycardia increase. With other general anesthetics, its depressant effect increases.

MIDAZOLAM

Clue	Description	Indications	Route of administration and dosage
040.000.2108.00	INJECTABLE SOLUTION Each vial contains: Midazolam hydrochloride equivalent to 5 mg of midazolam. – Midazolam 5 mg. Container with 5 vials with 5 mL.	Anesthetic induction. Sedation.	Deep intramuscular or intravenous. Adults: Intramuscular: 70 to 80 µg/kg body weight. Intravenous: 35 µg/kg body weight one hour before the surgical procedure. Total dose: 2.5 mg. Children: Deep intramuscular or intravenous: Induction: 150 to 200 µg/kg body weight, followed by 50 µg/kg body weight, according to the degree of induction desired. Administer diluted in intravenous solutions packaged in glass bottles.
040.000.4057.00	INJECTABLE SOLUTION Each vial contains: Midazolam hydrochloride equivalent to 15 mg of midazolam. – Midazolam 15 mg. Container with 5 vials with 3 mL.		
040.000.4060.00	INJECTABLE SOLUTION Each vial contains Hydrochloride of midazolam equivalent to 50 mg of midazolam. – Midazolam 50 mg. Container with 5 vials with 10 mL.		

Generalities

Short-acting benzodiazepine that acts mainly on the central nervous system, producing varying degrees of depression. Promotes the activity of the GABAergic system.

Risk in Pregnancy d

Adverse effects

Bradypnea, apnea, headache and arterial hypotension.

Contraindications and Precautions

Contraindications: Hypersensitivity to benzodiazepines, myasthenia gravis, glaucoma, shock, coma and alcohol poisoning.

Precautions: Prolonged use may cause dependence.

Interactions

With hypnotics, anxiolytics, antidepressants, opioids, anesthetics and alcohol, depression of the central nervous system increases.

NALOXONE

Clue	Description	Indications	Route of administration and dosage
040.000.0302.00	INJECTABLE SOLUTION Each vial contains: Hydrochloride naloxone 0.4 mg. Container with 10 vials with 1 mL.	Opioid poisoning.	Intramuscular, intravenous or subcutaneous. Adults: 0.4 to 2 mg every 3 minutes, until the therapeutic effect is obtained. Maximum dose 10 mg/day. Children: 0.1 mg/kg body weight/dose. Apply doses every 3 minutes, until obtaining a clinical response.

Generalities

Competitive antagonist of opioid analgesics. It lacks pharmacological activity by itself.

Risk in Pregnancy b

Adverse effects

Systemic arterial hypertension, tachycardia, nausea and vomiting. Withdrawal syndrome in narcotic addicts.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, systemic arterial hypertension and acute pulmonary edema.

Interactions

None of clinical importance.

NEOSTIGMINE

Clue	Description	Indications	Route of administration and dosage
010.000.0291.00	INJECTABLE SOLUTION Each vial contains: Neostigmine methyl sulfate 0.5 mg. Container with 6 vials with 1 mL.	Intoxication and effects adverse effects of non-depolarizing neuromuscular blocking agents. Abdominal distension. Bladder atony postoperative.	Intramuscular or subcutaneous. Adults: 0.5 to 2.5 mg, until response is obtained. Previously administer 0.6 to 1.2 mg of atropine. Children: 0.07 to 0.08 mg/kg body weight, until the response is obtained. Previously administer 0.01 mg of atropine.

Generalities

It inhibits the hydrolysis of acetylcholine, by competing with it for acetylcholinesterase.

Risk in Pregnancy

c

Adverse effects

Nausea, vomiting, diarrhea, muscle cramps, hypersalivation, bronchial secretions, bronchospasm, bradycardia, arterial hypotension, fasciculations and weakness.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, mechanical obstruction of the intestine or urinary tract.

Interactions

Medications with anticholinergic activity increase their adverse effects.

PRILOCAINE, PHELIPRESIN

Clue	Description	Indications	Route of administration and dosage
	INJECTABLE SOLUTION Each dental cartridge contains: Hydrochloride Prilocaine 54 mg. Felipressin 0.054 IU.	Local anesthesia for infiltration for: Pain during dental procedures.	Infiltration. Adults: One or two cartridges. Children: Half or a cartridge.
010.000.4058.00	Package with 1 cartridge with 1.8 mL.		
010.000.4058.01	Package with 50 cartridges with 1.8 mL.		

Generalities

Local anesthetic of the amide type, which acts on the sodium channels of the nerve membrane and its effect is prolonged with felipressin (vasoconstrictor).

Risk in Pregnancy

b

Adverse effects

Immediate hypersensitivity reactions, depression of myocardial function, methemoglobinemia, seizures and eat.

Contraindications and Precautions

Contraindications: Hypersensitivity to the components of the formula.

Interactions

None of clinical importance.

PROPOFOL

Clue	Description	Indications	Route of administration and dosage
	INJECTABLE EMULSION Each vial or vial contains: Propofol 200 mg. In emulsion with or without disodium edetate (dihydrate).	Induction and maintenance of general anesthesia.	Intravenous or continuous infusion. Adults: Induction: 2 to 2.5 mg/kg (40 mg every 10 minutes). Maintenance: 4 to 12 mg/kg/hour. Children over 8 years: Induction: 2.5 mg/kg. Maintenance: 10 mg/kg/hour. Administer diluted in intravenous solutions packaged in glass bottles.
010.000.0246.00	Package with 5 vials or 20 mL vials.		
	INJECTABLE EMULSION Each vial or vial contains: Propofol 200 mg. In solution with soybean oil, egg phosphatide or egg lecithin and glycerol.		
010.000.0244.00	Package with 5 vials or 20 mL vials.		
	INJECTABLE EMULSION		

	Each vial or syringe contains: Propofol 500 mg. In solution with soybean oil, egg phosphatide or egg lecithin and glycerol.		
010.000.0245.00	Container with a 50 mL vial or syringe.		

Generalities

Central nervous system depressant, similar to benzodiazepines and barbiturates.

Risk in Pregnancy b

Adverse effects

Headache, vertigo, clonic or myoclonic movements, bradycardia, apnea and changes in blood pressure.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug or any other component of the formula.
Precautions: In cardiovascular, renal disorders and pancreatitis.

Interactions

With opioids and sedatives they cause arterial hypotension. With inhaled anesthetics, anesthetic and cardiovascular activity is increased.

REMIFENTANIL

Clue	Description	Indications	Route of administration and dosage
	INJECTABLE SOLUTION Each vial contains: Remifentanil hydrochloride equivalent to 2 mg of remifentanil.	Indicated as agent analgesic induction or maintenance of general anesthesia in surgical procedures.	Intravenous continuous infusion. Adults and children over 1 year: General anesthesia: 0.5 to 1ÿg/Kg of weight body/minute.
040.000.0248.00	Container with 5 vials.	General anesthesia and analgesia.	Analgesia: 0.1 ÿg/Kg of body weight/ minute, adjusting the speed and dose of the infusion every 5 minutes with increments of 0.025 ÿg/Kg of body weight/minute.

Generalities

Selective ÿ receptor agonist opioid with rapid onset of action and short duration of effect.

Risk in Pregnancy c

Adverse effects

Sedation, nausea, vomiting, constipation, hypotension, musculoskeletal rigidity, postoperative chills, bradycardia, acute respiratory depression and postoperative apnea.

Contraindications and Precautions

Contraindications: Hypersensitivity to the components of the formula. Do not administer epidurally or intrathecally due to its neurotoxicity.

Precautions: Like all opioids, it is not recommended for use as a single agent in general anesthesia.

Interactions

It significantly reduces the quantities or doses of inhaled and intravenous anesthetics, as well as the sedatives required for anesthesia.

ROCURONIUM. BROMIDE

Clue	Description	Indications	Route of administration and dosage

010.000.4059.00	INJECTABLE SOLUTION Each vial or vial contains: Rocuronium bromide 50 mg. Package with 12 vials or 5 mL vials.	Muscle relaxation during surgical procedures.	Intravenous. Adults: Dosage according to the specialist's opinion. It will be administered diluted in intravenous solutions packaged in glass bottles.

Generalities

Non-deporalizing neuromuscular blocker with intermediate action and rapid onset of action.

Risk in Pregnancy

c

Adverse effects

Immediate hypersensitivity reactions, tachycardia, arterial hypertension and hypersensitivity.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug and bromides, tachycardia and pain at the application site.

Interactions

Aminoglycosides, halogenated anesthetics and quinidine enhance the effects. Opioid analgesics and lithium increase neuromuscular blockade with possible respiratory paralysis.

ROPIVACAINE

Clue	Description	Indications	Route of administration and dosage
010.000.0269.00	INJECTABLE SOLUTION Each vial contains: Ropivacaine hydrochloride monohydrate equivalent to 40 mg of ropivacaine hydrochloride. Container with 5 vials with 20 mL.	Local anesthesia. Epidural anesthesia.	Intraspinal or infiltration. Adults: Bolus epidural block: 20 to 40 mg. Epidural block in continuous infusion: 12 to 28 mg/hour. Infiltration and nerve block: 2 to 200 mg. Administer diluted in intravenous solutions packaged in glass bottles.
010.000.0270.00	INJECTABLE SOLUTION Each vial contains: Ropivacaine hydrochloride monohydrate equivalent to 150 mg of ropivacaine hydrochloride. Container with 5 vials with 20 mL.		Intraspinal or infiltration. Adults: Epidural block: 38 to 188 mg. Nerve block: 7.5 to 300 mg.

Generalities

Long-acting amide-type local anesthetic, developed as a pure enantiomer. It has both analgesic and anesthetic effects.

Risk in Pregnancy

c

Adverse effects

Arterial hypotension, nausea, bradycardia, vomiting, paresthesias, hyperthermia, headache, urinary retention, arterial hypertension, dizziness, chills, tachycardia, anxiety and hypoesthesia.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug.

Interactions

With other amide-type anesthetics it has additive effects. Verapamil, theophylline, fluvoxamine and imipramine increase its plasma concentration.

SEVOFLURANE

Clue	Description	Indications	Route of administration and dosage
010.000.0233.00	LIQUID OR SOLUTION Each container contains: Sevoflurane 250 mL. Container with 250 mL of liquid or solution.	induction and maintenance of general anesthesia.	By inhalation. Adults: Induction: start with 1%. Concentrations between 2 and 3% produce surgical anesthesia. Maintenance: with concentrations between 1.5 to 2.5%. Children: 2% concentrations.

Generalities

General anesthetic that induces a gentle and rapid loss of consciousness and allows rapid recovery.

Risk in Pregnancy

d

Adverse effects

Respiratory depression, arterial hypotension, bradycardia or tachycardia, agitation, tremor, nausea and vomiting. Possibility of liver and kidney poisoning.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug and halogenated anesthetics, history of malignant hyperthermia and renal failure.

Interactions

With aminoglycosides, neuromuscular blockade increases. With antihypertensives, arterial hypotension increases. Enhances the action of central nervous system depressants.

SUGAMMADEX

Clue	Description	Indications	Route of administration and dosage
010.000.6168.00	INJECTABLE SOLUTION Each vial contains: Sugammadex sodium equivalent to 200 mg by sugammadex Package with 10 vials with 2 mL of solution each (100 mg/mL).	Lock Reversal neuromuscular syndrome induced by rocuronium or vecuronium, patients with syndrome undergoing laparoscopic abdominal surgery.	Intravenous. Adults: 4 mg/Kg body weight, after rocuronium-induced blockade if recovery has been achieved in at least 1-2 post-tetanic counts. The average time for recovery of the T4/T1 ratio to 0.9 is around 3 minutes.

Generalities

Sugammadex is a modified gamma cyclodextrin that is a selective relaxant binding agent. It forms a complex with neuromuscular blockers such as rocuronium in plasma and therefore reduces the amount of neuromuscular blocker available to bind to nicotinic receptors at the neuromuscular junction. This results in reversal of rocuronium-induced neuromuscular blockade.

Risk in Pregnancy

c

Adverse effects

Transient chills and/or fever during drug infusion and anesthetic complications. Likewise, immune system disorders, traumatic injuries, poisoning and complications of the procedure have been reported.

Contraindications and Precautions

Contraindications: Hypersensitivity to the active substance.

Precautions: Monitor respiratory function during recovery, prolonged aPTT and PT with vitamin K antagonists, unfractionated heparin, low molecular weight heparinoids, rivaroxaban and dabigatran; reappearance of neuromuscular blockade at suboptimal doses; waiting times for readministration of neuromuscular blockers is after antagonizing with sugammadex; The use of sugammadex is not recommended in patients with severe renal failure, especially if they are on dialysis.

Interactions

Toremifene has a relatively high affinity constant to sugammadex and relatively high plasma concentrations may be present; some displacement of vecuronium or rocuronium from the sugammadex complex may occur.

The use of fusidic acid in the preoperative phase may delay the recovery of the T4/T1 ratio to 0.9, however, recurrence of neuromuscular blockade is not expected in the postoperative phase, since the infusion rate of the acid fusidic is a over a period of several hours and blood levels are cumulative over 2-3 days.

SUXAMETHONIUM, CHLORIDE

Clue	Description	Relaxing	Route of administration and dosage
010.000.0252.00	INJECTABLE SOLUTION Each vial contains: Chloride Suxamethonium 40 mg. Container with 5 vials with 2 mL.	**Indications** musculoskeletal during surgical procedures.	Intravenous or intramuscular. Adults: Intravenous: 25 to 75 mg, if another dose is necessary 2.5 mg/minute. Children: Initial (intravenous): 1 to 2 mg/kg body weight Intramuscular: 2.5 to 4 mg/kg body weight. Maintenance: Intravenous: 0.3 to 0.6 mg/kg body weight every 5 to 10 minutes. Administer diluted in intravenous solutions packaged in glass bottles.

Generalities

Ultrashort-acting depolarizing neuromuscular blocker.

Risk in Pregnancy

c

Adverse effects

Increased intraocular pressure, myoglobinuria, arterial hypertension or hypotension, arrhythmias, respiratory depression and apnea.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, myasthenia gravis, low cholinesterase levels, liver cirrhosis, malnutrition, exposure to insecticides, severe liver failure and hyperkalemia.

Interactions

Neuromuscular blockade is increased with opioids, aminoglycosides and inhaled anesthetics. With digitalis it favors cardiac arrhythmias. Prolonged apnea occurs with monoamine oxidase inhibitors and lithium.

SODIUM THIOPENTAL

Clue	Description	Indications	Route of administration and dosage
040.000.0221.00	INJECTABLE SOLUTION Each vial with powder contains: Sodium thiopental 0.5 g. Container with vial and diluent with 20 mL.	Anesthetic agent in short surgical procedures.	Intravenous. Adults: 3 to 4 mg/kg body weight. Children: 2 to 3 mg/kg body weight. Administer diluted in intravenous solutions packaged in glass bottles.

Generalities

Ultrashort-acting thiobarbiturate that increases the inhibitory action of GABA, decreases responses to glutamate, depressing neuronal excitability.

Risk in Pregnancy C

Adverse effects

Arterial hypotension, respiratory depression, laryngospasm, bronchospasm, cardiac arrhythmias and apnea.

Contraindications and Precautions

Contraindications: Hypersensitivity to barbiturates, porphyria, liver or kidney failure and shock.

Interactions

Increases the effect of antihypertensives and central nervous system depressants.

VECURONIUM

Clue	Description	Indications	Route of administration and dosage
010.000.0254.00	INJECTABLE SOLUTION Each vial with lyophilisate contains: Vecuronium bromide 4 mg. Package with 50 vials and 50 ampoules with 1 mL of diluent (4 mg/mL).	Neuromuscular relaxation during surgical procedures.	Intravenous. Adults and children over 9 years old: Initial: 80 to 100 µg/kg body weight. Maintenance: 10 to 15 µg/kg of weight body, 25 to 40 minutes after initial dose. Administer diluted in intravenous solutions packaged in glass bottles.

Generalities

Antagonist of cholinergic receptors. Prevents the binding of acetylcholine to muscle end plate receptors, competing for the receptor site.

Risk in Pregnancy C

Adverse effects

Prolonged apnea, transient tachycardia, pruritus and erythema.

Contraindications and Precautions

Contraindications: Hypersensitivity to the drug, to other bromides and tachycardia.

Interactions

With aminoglycosides, halogenated anesthetics and quinidine, its effects are increased. Opioid analgesics and lithium potentiate neuromuscular blockade.