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TECHNICAL DATA SHEET ARTHEEK 4% SP
DPFTPT-130

1. PRODUCT OVERVIEW

1.1. Brand name

Artheek 4% SP

1.2. Generic name

Articaine Hydrochloride 4% with Epinephrine 1:100.000 injectable solution

1.3. Dosage form

Injectable solution

1.4. Description

Artheek 4% SP is an injectable solution for dental use that contains as active ingredients Articaine Hydrochloride in a 4% concentration as generator of the anesthetic effect and Epinephrine base in a 0.01% concentration as a vasoconstrictor.

Articaine Hydrochloride is an amide-type anesthetic agent with intermediate action, short latency time, rapid metabolism and high binding to plasmatic proteins, which allows an adequate anesthetic profund, a decrease in the incidence of adverse reactions and a low probability of systemic toxicity. Epinephrine, on the other hand, acts as a vasoconstrictor, allowing to enhance anesthetic effects, increase the duration of the effect and decrease the permeability of the product at the systemic level.

2. COMPOSITION INFORMATION

2.1. Active pharmaceutical ingredients

The active ingredients of Articaine Hydrochloride 4% with Epinephrine 1:100,000 are described below:

COMPONENT	CONCENTRATION	QUANTITY PER CARTRIDGE 1,8 mL
Articaine Hydrochloride	40 mg/mL	72 mg
Epinephrine	0,01 mg/mL	0,018 mg

2.2. Non-active pharmaceutical ingredients

The excipients of Articaine Hydrochloride 4% with Epinephrine 1:100,000 are described below:

COMPONENT
Sodium Metabisulfite
Sodium Chloride
Hydrochloric Acid
Water for injection

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3. PRODUCT PROPERTIES

3.1. Physical-chemical properties

PROPERTIES	VALUE
Apperience	Clear solution, Colorless
Odor	Odorless
Stage	Liquid
Volume	1,8 mL
Density	~ 1,0 g/cm^3
Viscosity	~ 1,0 cp
Solubility	Very Soluble
Boiling point	~ 100 °C
Melting point	~ 0 °C

3.2. Pharmacological properties

Pharmacodynamics properties

Pharmacotherapeutic Group: Nervuos system / Local Anesthetics / Anesthetics / Amides /Articaine, combinations, ATC cod: N01BB58

Mechanism of action and pharmacodynamic effects: Articaine hydrochloride, an amide local anesthetic, reversibly blocks nerve conduction through a known mechanism that has been commonly observed with other amide local anesthetics. This consists of the decrease or prevention of the large transient increase in the permeability of excitable membranes to sodium (Na^+), which is normally produced by a slight depolarization of the membrane. This produces an anesthetic action. As the anesthetic action progressively develops in the nerve, the threshold of electrical excitability gradually increases, the rate of action potential rise decreases, and impulse conduction slows. The pKa value of Articaine Hydrochloride has been estimated to be 7.8.

Epinephrine, as a vasoconstrictor, acts directly on both α-adrenergic and β-adrenergic receptors: β-adrenergic effects predominate. Epinephrine prolongs the duration of effect of Articaine Hydrochloride and reduces the risk of excessive uptake in the systemic circulation.

Clinical efficacy and safety: Articaine Hydrochloride 4% with Epinephrine 1:100,000 has an onset of action of 1.5-1.8 min in the case of infiltration and 1.4-3.6 min in the case of nerve block.

The anesthetic duration of Articaine Hydrochloride 4% with Epinephrine at 1: 100,000 is 60-75 minutes in pulpal anesthesia and 180-360 minutes in soft tissue anesthesia.

No difference in pharmacodynamic properties was observed between the adult and pediatric population.

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Pharmacokinetics properties

Absorption: In three published clinical studies describing the pharmacokinetic profile of the combination of Articaine Hydrochloride 40 mg/ml and Epinephrine 1:100,000, T_{max} values were between 10 and 12 minutes, with Cmax values between 400 and 2100. ng/ml.

In clinical trials in children, the C_{max} value was 1382 ng/ml and the T_{max} 7.78 minutes, after infiltration of a dose of 2 mg/kg body weight.

Distribution: High protein binding was observed with human serum albumin (68.5-80.8%) and α/β-globulins (62.5-73.4%). Binding to α-globulin (8.6-23.7%) was much lower. Epinephrine is a vasoconstrictor added to Articaine Hydrochloride to slow absorption into the systemic circulation and thus prolong the maintenance of active Articaine Hydrochloride concentration in the tissue. The volume of distribution in plasma was approximately 4 l/kg.

Biotransformation: Nonspecific tissue and blood esterases subject the carboxyl group of Articaine Hydrochloride to hydrolysis. Since this hydrolysis is very fast, about 90% of the hydrolysis is deactivated in this way. In addition, Articaine Hydrochloride is metabolized in the microsomes of the liver. Articainic Acid is the major product of cytochrome P450-induced metabolism of Articaine Hydrochloride, which is further metabolized to form Articainic Acid glucuronide.

Elimination: Following dental injection, the elimination half-life of Articaine Hydrochloride was approximately 20-40 minutes. In a clinical trial, plasma concentrations of Articaine Hydrochloride and Articainic Acid were shown to decrease rapidly following submucosal injection. Very little Articaine hydrochloride was detected in plasma between 12 and 24 hours after injection. More than 50% of the dose was eliminated in the urine, 95% as Articainic Acid, within 8 hours after administration. At 24 hours, approximately 57% (68 mg) and 53% (204 mg) of the dose had been eliminated in the urine. Renal elimination of unchanged Articaine only accounted for about 2% of the total elimination.

4. USE AND APPLICATIONS

4.1. Indications

Local and locoregional anesthesia in dental procedures. Articaine Hydrochloride 4% with Epinephrine 1:100,000 is indicated in adults, adolescents and children over 4 years of age (or from 20 kg).

4.2. Posology

For all populations, the lowest dose that results in effective anesthesia should be used. The necessary dose must be determined individually. For a routine procedure, the normal dose for adult patients is 1 cartridge, but the contents of less than one cartridge may be sufficient for effective anesthesia. At the discretion of the dentist, more cartridges may be required for more extensive procedures, not to exceed the maximum recommended dosage.

In adults and adolescents, the maximum dose of Artic|aine Hydrochloride is 7 mg/kg, with an absolute maximum dose of Articaine Hydrochloride of 500 mg.

Elderly patients and patients with kidney disorders.

Due to the lack of clinical data, special precautions should be taken to administer the lowest dose that provides effective anesthesia in elderly patients and in patients with renal disorders.

Patients with hepatic insufficiency.

In patients with hepatic insufficiency, special precautions should be taken to administer the lowest dose that provides effective anesthesia, especially after repeated use, although 90% of Articaine Hydrochloride is first inactivated by non-specific tissue plasma esterases and the blood.

Patients with deficiencies of plasmatic cholinesterase

High plasma levels of the product may occur in patients with cholinesterase deficiency or under treatment with acetylcholinesterase inhibitors, since the product is 90% deactivated by plasma esterases. Therefore, the lowest dose that provides effective anesthesia should be used.

4.3. Interactions

Interactions with Articaine Hydrochloride.

- Other Anesthetics:

The toxicity of local anesthetics is additive.

The total dose of all local anesthetics administered should not exceed the maximum recommended dose of the drugs used.

- Sedatives (central nervous system depressants, eg, benzodiazepines, opiates):

If sedatives are used to reduce patient apprehension, reduced doses of anesthetics should be used, since local anesthetic agents, like sedatives, are central nervous system depressants that, when combined, may have an additive effect.

Interactions with Epinephrine.

- Halogenated volatile anesthetics (eg, halothane):

Reduced doses of this drug should be used due to sensitization of the heart to the arrhythmogenic effects of catecholamines: risk of serious ventricular arrhythmia.

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It is recommended to discuss this with the anesthesiologist before administering the local anesthetic during general anesthesia.

- Postganglionic adrenergic blocking agents (eg, guanadrel, guanethidine, and rauwolfia alkaloids):

This drug should be used in reduced doses and under strict medical supervision with careful aspiration due to possible increased response to adrenergic vasoconstrictors: risk of hypertension and other cardiovascular effects.

- Nonselective β-adrenergic blockers (eg, propranolol, nadolol):

This medicine should be used in reduced doses due to a possible increase in blood pressure and an increased risk of bradycardia.

- Tricyclic antidepressants (TCAs) (eg, amitriptyline, desipramine, imipramine)

This drug should be used at reduced doses and administration rates due to an increased risk of severe hypertension.

- COMT inhibitors (catechol-O-methyltransferase inhibitors) (eg, entacapone, tolcapone):

Arrhythmias, increased heart rate and variations in blood pressure may appear. Patients treated with COMT inhibitors should receive a reduced amount of epinephrine in dental anesthesia.

- MAO inhibitors (both α-selective and non-selective):

If concomitant use of these agents cannot be avoided, the dose and rate of administration of this drug should be reduced and used under strict medical supervision due to possible potentiation of the effects of epinephrine, which may cause a risk of seizures. hypertensive.

- Drugs that cause arrhythmias (eg, antiarrhythmics such as digitalis, quinidine):

This drug should be used at reduced administration doses due to an increased risk of arrhythmia when epinephrine and digitalis glycosides are co-administered to patients. Careful aspiration is recommended before administration.

- Ergotic oxytocic drugs (eg, methysergide, ergotamine, ergonovine):

This drug should be used under strict medical supervision due to additive or synergistic increases in blood pressure and/or ischemic response.

- Sympathomimetic vasopressors (eg, primarily cocaine, but also amphetamines, phenylephrine):

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There is a risk of adrenergic toxicity. If a sympathomimetic vasopressor has been used within the previous 24 hours, planned dental treatment should be postponed.

- Phenothiazines (and other neuroleptics):

It should be used with caution in patients receiving phenothiazines due to the risk of hypotension due to the possible inhibition of the effect of Epinephrine.

4.4. Overdose

The term local anesthetic overdose is often used in a broad sense to describe:

- Absolute overdose
- Relative overdose
  - Accidental injection into a blood vessel
  - Abnormal rapid absorption into the systemic circulation
  - Delayed drug metabolism and elimination

In case of relative overdose, patients usually develop symptoms within a few minutes. In contrast, in the case of absolute overdose, signs of toxicity appear some time after injection, depending on the injection site. Following an overdose (absolute or relative), since arousal may be transient or absent, the first manifestation may be drowsiness, progressing to unconsciousness and respiratory arrest.

Symptoms due to Articaine Hydrochloride:

Symptoms are dose dependent and progressive in severity in the range of neurological manifestations (presyncope, syncope, headache, restlessness, agitation, confusional state, disorientation, dizziness, tremor, stupor, profound CNS depression, loss of consciousness, coma, seizures, speech disturbances, balance disturbances, ocular manifestations (mydriasis, blurred vision, accommodation disorder), followed by vascular toxicity (pallor, respiratory (apnea, bradypnea, tachypnea, yawning, respiratory depression) and finally cardiac (cardiac arrest, myocardial depression) Acidosis exacerbates the toxic effects of local anesthetics.

Symptoms due to Epinephrine:

Symptoms are dose-dependent and progressive in severity in the range of neurological manifestations (restlessness, agitation, near-syncope, syncope), followed by vascular (pallor [local, regional, general]), respiratory (apnea [respiratory arrest], bradypnea, tachypnea, respiratory depression) and, finally, cardiac.

4.5. Safety data

HEALTH	ENVIRONMENT	PHYSICAL
Not classified as dangerous. Substance or mixture exempt from classification under GHS		

GHS: Global Harmonization System.

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See safety data sheet

4.6. Contraindications

- Hypersensitivity to Articaine Hydrochloride (or other anesthetic agent of the amide type), to Epinephrine or to any of the excipients included.
- Epileptic patients not controlled with treatment.

4.7. Warnings

This drug should be used with caution in patients with the following disorders:

Patients with cardiovascular disorders:

The lowest dose that provides effective anesthesia should be used in case of:

- Cardiac impulse formation and conduction disturbances
- Acute decompensated heart failure (acute congestive heart failure)
- Hypotension
- Patients with paroxysmal tachycardia or absolute arrhythmias with rapid heart rate.
- Patients with unstable angina or recent history (less than 6 months) of myocardial infarction.
- Patients undergoing a recent coronary artery bypass graft (3 months).
- Patients receiving non-cardioselective beta-blockers
- Patients with uncontrolled hypertension.
- Concomitant treatment with tricyclic antidepressants, since these active ingredients can intensify the cardiovascular effects of Epinephrine.

Patients with epileptic disease:

Due to their convulsive effects, all local anesthetics should be used with caution.

Patients with plasma cholinesterase deficiency:

Plasma cholinesterase deficiency may be suspected when clinical signs of overdose appear with a usual dose of anesthesia and vascular injection has been excluded. In that case, the next injection should be given with caution and the dose will be reduced.

Patients with kidney disease:

The lowest dose that provides effective anesthesia should be used.

Patients with severe liver disease:

This drug should be used with caution due to the presence of liver disease.

Patients with myasthenia gravis treated with acetylcholinesterase inhibitors:

The lowest dose that provides effective anesthesia should be used.

Porphyria patients:

It should be used in patients with acute porphyria only when no safer alternative is available. Appropriate precautions should be taken in all patients with porphyria, as this drug may trigger porphyria.

Patients with concomitant treatment with inhaled halogenated anesthetics:

The lowest dose of drug that provides effective anesthesia should be used.

Patients receiving antiplatelet/anticoagulant therapy:

It should be administered with caution in patients who are taking antiplatelet or anticoagulant drugs or who suffer from a coagulation disorder, since they have a higher risk of bleeding. The increased risk of bleeding is related to the procedure rather than the drug.

Elderly patients:

Elevated plasma drug levels may occur in elderly patients, especially after repeated use. Therefore, the lowest dose that provides effective anesthesia should be used.

4.8. Cautions

Risk associated with accidental intravascular injection:

An accidental intravascular injection can cause sudden high levels of Epinephrine and Articaine chlorhydrate in the systemic circulation. This may be associated with serious adverse reactions, such as convulsions, followed by cardiorespiratory and central nervous depression and coma, progressing to respiratory and circulatory arrest. Therefore, to ensure that the needle does not enter a blood vessel during the injection, aspiration should be performed prior to injecting the local anesthetic medication. However, the absence of blood in the syringe does not guarantee that intravascular injection has not taken place.

Risk associated with intraneural injection:

An accidental intraneural injection can cause the drug to travel retrograde through the nerve. To avoid intraneural injection and nerve damage when performing nerve blocks, the needle should be withdrawn slightly whenever the patient feels a discharge sensation during the injection or if the injection is particularly painful. If nerve injuries are caused by the needle, the neurotoxic effect can be aggravated by the possible chemical neurotoxicity of Articaine Hydrochloride and the presence of Epinephrine, since it can reduce perineural blood flow and prevent local elimination of the anesthetic.

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4.9. Fertility, pregnancy, lactation.

Pregnancy

Animal studies, as well as with Articaine Hydrochloride monotherapy, have shown no adverse effects on pregnancy, embryonic/fetal development, parturition or postnatal development. Animal studies have shown epinephrine to be toxic to reproduction at doses above the maximum recommended dose.

There is no experience in the use of Articaine Hydrochloride in pregnant women, except during childbirth. Epinephrine and Articaine Hydrochloride cross the placental barrier, although Articaine Hydrochloride does so to a lesser extent than other local anesthetics. Serum Articaine Hydrochloride concentrations measured in neonates were approximately 30% of maternal levels.

In the event of accidental intravascular administration in the mother, epinephrine may reduce uterine perfusion. During pregnancy it should only be used after a careful analysis of the benefit-risk ratio.

Lactation

As a result of the rapid decline in serum levels and rapid elimination, no clinically relevant amounts of Articaine Hydrochloride are found in breast milk. Epinephrine is excreted in breast milk but also has a short half-life. Normally, it is not necessary to stop nursing during short-term use, starting 5 hours after anesthesia.

Fertility

Animal studies with Articaine Hydrochloride have not shown any effect on fertility. At therapeutic doses, no adverse effects on human fertility are expected.

4.10. Side effects

Adverse reactions after the administration of Articaine Hydrochloride 4% with Epinephrine 1:100,000 are similar to those observed with other local anesthetic amides/vasoconstrictors. Generally, these adverse reactions are dose related. They may also be the result of patient hypersensitivity, idiosyncrasy, or reduced tolerance. The most frequently occurring adverse reactions are nervous system disorders, local reactions at the injection site, hypersensitivity, cardiac disorders and vascular disorders.

MedDRA CLASSIFICATION OF SYSTEM ORGANS	FREQUENCY	SIDE EFFECTS
Infections and infestations	Frequent	Gingivitis
Immune system disorders	Rare	Allergic reactions [1], Anaphylactic/anaphylactoid

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Psychiatric disorders	Rare	Nervousness/anxiety [4]
	Not known	Euphoric mood
Nervous system disorders	Frequent	Neuropathy: Neuralgia (neuropathic pain) Hypoesthesia/numbness (oral and perioral)[4] Hyperesthesia Dysesthesia (oral and perioral), including Dysgeusia (eg, metallic taste, taste disturbances) Ageusia Allodynia Thermohyperesthesia Headache
	Infrequent	Burning sensation
	Rare	Facial nerve disorder[2] (paralysis and paresis) Horner's syndrome (palpebral ptosis, enophthalmos, miosis). Somnolence (drowsiness) Nystagmus
	Very rare	Paresthesia[3] (persistent hypoesthesia and loss of taste) after mandibular or inferior alveolar nerve block
Eye disorders	Rare	Diplopia (paralysis of the oculomotor muscles)[4] Visual disturbances (temporary blindness)[4] Ptosis miosis Enophthalmos
Ear and labyrinth disorders	Rare	Hyperacusis Tinnitus[4]
Cardiac disorders	Frequent	Bradycardia Tachycardia
	Rare	Palpitations

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	Not known	Conduction disorders (atrioventricular block)
Vascular disorders	Frequent	Hypotension (with possible circulatory collapse)
	Infrequent	Hypertension
	Rare	Hot flashes
	Not known	Hyperemia local/regional Vasodilatation Vasoconstriction
Respiratory, thoracic and mediastinal disorders	Rare	Bronchospasm/asthma Dyspnea[2]
	Not known	Dysphonia (hoarseness)[1]
Gastrointestinal disorders	Frequent	Swelling of the tongue, lips, and gums
	Infrequent	Stomatitis, glossitis Nausea, vomiting, diarrhea
	Rare	Exfoliation (scaling)/gingival/oral mucosal ulceration
	Not known	Dysphagia Swelling of the cheeks Glossodynia
Skin and subcutaneous tissue disorders	Infrequent	Rash Pruritus
	Rare	Angioedema (face/tongue/lips/throat/larynx/periorbital edema) Urticaria
	Not known	Erythema Hyperhidrosis
Musculoskeletal and connective tissue disorders	Infrequent	Neck Pain
	Rare	Muscle contraction[4]
	Not known	Worsening of neuromuscular Manifestations of Kearns-Sayre syndrome Trismus
General disorders and administration site conditions	Infrequent	Injection site pain
	Rare	Exfoliation/necrosis at the injection site Fatigue, asthenia (weakness)/chills

	Not known	Local swelling. Warmth sensation Feeling cold

[1] Allergic reaction should not be confused with syncopal episodes (heart palpitations due to Epinephrine).

[2] A 2-week delay in the onset of facial paralysis has been described after the administration of Articaine Hydrochloride combined with Epinephrine, and the condition did not change 6 months later.

[3] These neural pathologies can occur with various symptoms of abnormal sensations. Paresthesia can be defined as a spontaneous, usually non-painful, abnormal sensation (eg, burning, prickling, or itching) that persists much longer than the expected duration of anesthesia. Most cases of paresthesia reported after dental treatment are transient and resolve within days, weeks, or months.

Persistent paresthesia, primarily following a nerve block of the jaw, is characterized by slow, incomplete, or non-existent recovery.

[4] Various adverse events, such as agitation, anxiety/nervousness, tremors, or speech disturbances, may be warning signs of CNS depression. To treat these signs, patients should be asked to hyperventilate and surveillance should be instituted.

5. QUALITY ASSUREMENT

The product Articaine Hydrochloride 4% with Epinephrine 1:100,000 is manufactured under the strictest technical and quality controls, its production process is carried out in special manufacturing areas that have environmental, microbiological, operational controls, it is carried out by staff previously trained and trained for this type of process. The supplies used in this are previously verified and approved in accordance with the requirements of current pharmacopoeias, this process includes control of packaging materials, raw materials and supplies which are acquired by qualified suppliers.

Product quality characteristics are described below:

PARAMETER	ESPECIFICATION	REFERENCE
Physical-chemical		
Description	Transparent liquid, colorless	USP
Particulate		
Visible	Each Cartridge must be practically free of visible particles	USP
Sub-visible	The preparation complies with the test if the average number of particles present in the units tested does not exceed 3000 particles equal to or greater than 10 µm per container and does not exceed 300 particles equal to or greater than 25 µm per container.	USP

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Delivery volume	The average volume of liquid obtained from the 10 containers is not less than 100% and the volume of each of the 10 containers is within the range of 95%–110% of the volume declared on the label.	USP
pH	2,7 – 5,2	USP
Instrumental		
Identification		
Articaine Hydrochloride	The retention times of Articaine in the Sample solution correspond to those of the Standard solution, as obtained in the Articaine Hydrochloride Assessment.	USP
Epinephrine	The retention times of Epinephrine of the Sample solution correspond to those of the Standard solution, as obtained in the Epinephrine Assay.	USP
Assay		
Articaine Hydrochloride	95%-105%	USP
Epinephrine	90%-110%	USP
Articaine, organic impurities		
Related compound B	≤ 0,5%	USP
Other individual impurity	≤ 0,2%	USP
Total impurities	≤ 0,5%	USP
Epinephrine, organic impurities		
Epinephrine Sulfonate	≤ 7,5%	USP
Specific Impurity	≤ 8,0%	USP
Other individual impurity	≤ 1,0%	USP
Total impurities	≤ 10,0%	USP
Microbiological		
Mesophiles	No growth of microorganisms	USP
Fungi and Yeasts	No growth of microorganisms	USP
Bacterial endotoxins	≤0.7 EU USP / mg of Articaine HCl equivalent to 28 EU /mL of injectable solution	USP

6. INSTRUCTIONS

6.1. Preparation and administration.

The cartridges must not be placed in solutions made with anti-corrosion tablets or solutions of quaternary ammonium salts such as benzalkonium chloride. Certain metallic ions, such as Mercury, Zinc and Copper,

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are contained by disinfectant solutions and these also cause inflammation after anesthesia, therefore, the Cartridges should not be immersed in these solutions.

For chemical disinfection of the Cartridge surface, 91% isopropyl alcohol or 70% ethyl alcohol without denaturants is recommended; solutions containing heavy metals are not recommended.

The product should not be used if the solution is colored (pinkish or brownish) or if it contains a precipitate. The anesthetic Articaine Hydrochloride 4% with Epinephrine 1:100,000 must not be subjected to a sterilization process by autoclaving, due to thermal decomposition of Epinephrine (thermolabile). Any remaining portion of the Cartridge should be discarded.

This product should only be used by, or under the supervision of, a physician or dentist who is adequately trained and familiar with the diagnosis and treatment of systemic toxicity. The patient's state of consciousness should be monitored after each injection of local anesthesia.

When using Articaine Hydrochloride 4% with Epinephrine 1:100,000 for regional anesthetic infiltration or blockade, the injection should always be administered slowly and with prior aspiration.

To avoid the risk of infection (eg, transmission of hepatitis), the syringe and needles used to prepare the solution must always be new and sterile. Disposal of unused medication and all materials that have come into contact with it will be done in accordance with local regulations.

6.2. Treatment in case of overdose.

Prior to the administration of regional anesthesia with local anesthetics, adequate resuscitation equipment and drugs must be ensured so that any respiratory or cardiovascular emergency can be treated immediately. Depending on the severity of overdose symptoms, the physician or dentist should implement protocols that anticipate the need to protect the airway and provide assisted ventilation.

The patient's state of consciousness should be monitored after each injection of local anesthesia. If signs of acute systemic toxicity appear, injection of the local anesthetic should be stopped immediately. If necessary, place the patient in a supine position.

CNS symptoms (seizures, CNS depression) should be treated immediately with appropriate airway/respiratory support and administration of anticonvulsant drugs.

Optimal oxygenation and ventilation, along with circulatory support and treatment of acidosis, can prevent cardiac arrest.

If cardiovascular depression (hypotension, bradycardia) occurs, appropriate treatment with intravenous fluids, vasopressors, or inotropic agents should be considered. Children should be given doses according to their age and weight.

In the event of cardiac arrest, cardiopulmonary resuscitation should be performed immediately.

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7. COMMERCIAL PRESENTATIONS

7.1. Nature of primary packaging.

- Type I borosilicate glass cartridge with aluminum clip and Chlorobutyl liner and with Bromobutyl plunger.

7.2. Nature of secondary packaging.

- Blister of PET material sealed with propalcote paper in a cardboard box

7.3. Approved Presentations.

- Blister box for 50 cartridges of 1.8 mL.
- Blister box for 20 cartridges of 1.8 mL.
- Blister box for 10 cartridges of 1.8 mL.

7.4. Health certificate

INVIMA 2016M-0016991*

*According to the number of renewals, the registration includes the -R designation. (For example: R1 for the first renewal, R2 for the second, and so on).

8. STORAGE CONDITIONS

8.1. Storage cautions.

Keep out of reach of children. Do not administer if the solution is not clear, contains particles or sediment in the solution.

The injectable product Articaine Hydrochloride 4% with Epinephrine 1:100,000 must be stored in a place protected from sunlight, heat or intense light sources. Store at a temperature below 30 °C. Do not freeze.

8.2. Period of validity.

Shelf life of 2 years from the date of manufacture.

8.3. Incompatibilities

Do not store together with alcohols or acrylic monomers.