RESTRICTED VETERINARY MEDICINE
KEEP OUT OF REACH OF CHILDREN
FOR ANIMAL TREATMENT ONLY

Voren® Suspension

Boehringer Ingelheim

Composition

Voren® Suspension contains 1.0 mg/ml of dexamethasone 21-isonicotinate, equivalent to 0.7888 mg of dexamethasone, in a white, cloudy aqueous suspension for injection.

Pharmacological properties

- **Summary presentation of the active ingredient:**
  Dexamethasone-21-isonicotinate is a pyridine-4-carboxylic acid ester of dexamethasone. It is a potent synthetic fluorinated glucocorticoid which, like other corticosteroids, reacts with receptor proteins in the cytoplasm of sensitive cells in many tissues to form a steroid receptor complex. The complex undergoes a modification and then moves into the nucleus, where it binds to chromatin and regulates transcription of specific genes. In most cases transcription is enhanced, as manifested by increased amounts of specific mRNA. This enhanced transcription results for example in the induction of lipocortin, an inhibitor of phospholipase A_2, which leads to a reduced synthesis of prostaglandins and leukotrienes.
- **Pharmacodynamic properties:**
  Dexamethasone 21-isonicotinate exerts antiphlogistic, anti-exudative, glycogenic, lipolytic, monocytopenic, neutrophilic and lymphopenic effects.
- **Pharmacokinetic properties:**
  Absorption:
  Voren® Suspension may be administered subcutaneously or intramuscularly. The absorption from the I.M. injection site is delayed due to the microcrystalline preparation with 95% of particles being less than 12 μm. The absolute bioavailability following I.M. administration to dogs is 40%.
  Distribution:
  Following its absorption, dexamethasone-21- isonicotinate is immediately hydrolysed to dexamethasone by unspecific enterases and penetrates quickly into all tissues except fat. Its volume of distribution (VD area) is ca. 1.3 L/kg in the dog and approximately 0.9 L/kg in horses. Binding to plasma proteins of dogs is 73%. Dexamethasone binds mainly to albumin with low affinity.
  Metabolism:
  In addition to unchanged dexamethasone the major metabolites excreted in urine of man, rats and horses are dexamethasone glucuronide and 6-β-hydroxydexamethasone. Oxidation at C11 and C17 and reduction at C20 are only minor

pathways in biotransformation. Neither of the major metabolites exerts any pharmacodynamic activity.

Elimination:

The total clearance is 0.39 and 0.74 L/kg per hour in dogs and horses respectively.

In a study in healthy thoroughbred horses, Voren® Suspension was administered intramuscularly and detected in urine up to 6 days post dosing.

Indications

Voren® Suspension has glucogenic, anti-inflammatory and anti-allergic properties and is indicated for the treatment of a wide range of conditions in horses, dogs and cats. For example: Inflammatory conditions of the skin, the locomotor and respiratory system.

DIRECTIONS FOR USE

Precautions and Contraindications

The product should not be administered during the last third of pregnancy, in cases of suspected osteoporotic processes, diabetes mellitus or fungal and viral infections, or in animals suffering from renal insufficiency or from congestive heart failure. The use is contraindicated in animals with ulcers of the cornea and also in cases of bacterial infections without concomitant antibiotic therapy. Single administration of anti-inflammatory corticosteroids, such as dexamethasone, is generally well tolerated even at high doses. The product has been shown to be well tolerated in the target species at the recommended dosages.

Dosage and Administration

Shake well before use.

Horses:

1 ml per 50 kg bodyweight, by intramuscular injection (ie. 0.02 mg dexamethasone-21-isonicotinate per kg body weight).

Dogs and cats:

0.1 mL per kg bodyweight, by intramuscular or subcutaneous injection (ie. 0.1 mg dexamethasone-21-isonicotinate per kg bodyweight).

In the case of injections into synovial cavities, smaller doses corresponding to the size of the joint cavity should be used.

In dogs and cats the dose may be repeated approximately 4 days after the initial administration.

WITHHOLDING PERIOD

NOTTO BE USED in food producing species.

Disposal

Dispose of empty container by wrapping in paper and putting in garbage.

Storage

Store below 30°C (room temperature). Protect from frost.

RESTRICTED VETERINARY MEDICINE

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See www.foodsafety.govt.nz for registration conditions.

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