PRESCRIPTION ANIMAL REMEDY
KEEP OUT OF REACH OF CHILDREN
FOR ANIMAL TREATMENT ONLY

Voren®

Boehringer Ingelheim

Dexamethasone ester for injection

Composition
Voren® suspension is an aqueous, microcrystalline suspension of pyridine-4-carbonic acid (dexamethasone 2.1) - ester having 1 mg of active substance per mL. 0.2% Nipagin/Nipasol is added as a preservative.

Pharmacology
Glucocorticoid effect: The glucocorticoid activity of Voren® was tested, after various modes of administration, by the liver glycogen test, carried out on male rats which had been starved for 24 hours. The parent substance, dexamethasone, served as a comparison. After a single intramuscular injection of equimolar doses of Voren® and dexamethasone, the degree of increase of liver glycogen was evaluated with regard to the duration of action. It was shown that the action of Voren® (4 days) was maintained for a longer time than that of dexamethasone (3 days). The index of activity of Voren® is about 3 times higher than that of dexamethasone.

Inflammation-inhibiting properties
The standard test of anti-proliferative action (the cotton pellet test in the rat) indicated that equimolar doses produced a ratio of activity of Voren® to dexamethasone of almost 28:1 in topical use and 6:1 by intramuscular use. Oral medication indicated an equipotent activity. A modified granuloma pouch technique was used to test the anti-exudative action of Voren® compared with dexamethasone 24 hours after the application of equimolar doses by more than 6 times. 48 hours after application, the action of Voren® was even more marked, while that of dexamethasone had completely died away.

Action on electrolytes
The mineralocorticoid action of Voren® was tested in comparison with dexamethasone by the sodium-potassium excretion test, carried out in adrenalectomised rats. The sodium showed no significant changes. The increase in potassium excretion was shown to be dependent upon the dose and on the time interval between administration and testing. Initially Voren® fell behind dexamethasone in its potassium-excreting potency. However, after 48 hours Voren® surpassed dexamethasone in this action, so that the total excretion for the two substances over the 48-hour period is practically the same.

Clinical
The well-known and proven pharmacological advantages of Voren® have been confirmed in extensive clinical use.
In all the indications listed below, Voren® proved itself too, and led to rapid recovery and a significantly lowered proportion of relapses. This action can probably be attributed to the marked depot-effect. In all cases, the dose in mg was about 1/10 of the lowest usual amount of prednisolone. Pharmacological examinations have shown that the peripheral action on the metabolism is stronger than in any other glucocorticoids yet known, but that the inhibitory effect on the hypophysis-adrenal cortex-system is less than that of dexamethasone. For this reason undesirable side-effects need not be anticipated, e.g. the polydipsia seen in dogs after prednisolone therapy does not occur.

Indications
Horses: Tenosynovitis, bursitis, arthritis, azoturia, etc.
Dogs/Cats: Eczema, otitis, arthritis, allergies, early intervertebral disc syndrome, etc.
In all species as an anti-inflammatory and anti-allergic agent, and for a general increase in toxin tolerance, in infections such as: Infections of young animals
Peritonitis

Directions for Use
SHAKE well before use.
USE within 24 hours of initial broaching.

RESTRAINTS
DO NOT USE in horses that may be used for human consumption.

Contraindications
This product is contraindicated for use in animals suffering from osteoporotic processes, diabetes mellitus, and active tuberculosis.
This product is contraindicated for use in the last third of pregnancy.

SIDE EFFECTS
In spite of its prolonged and increased specific glucocorticoid action, after parenteral administration, as compared with other corticoids derivatives, Voren® does not show any significant increase in toxicity. The acute toxicity (LD50) in mice after intraperitoneal administration, and an observation time of 7 days is 446 mg/kg.
In an evaluation of the sub-chronic toxicity of Voren® (application over a period of 16 weeks), it was shown that besides its specific steroid effects, Voren® produced no other non-specific organ damage. In the same manner as all other glucocorticoids, Voren® causes an inhibition of ACTH production, which leads to a diminished activity of the adrenal cortex for the duration of the treatment. This state, however, is reversible, and only calls for extra caution in a prolonged treatment with repeated administration. In cases of prolonged administration the doses of Voren® should be gradually withdrawn towards the end of treatment. Gradual withdrawal to the substance should lead to a normal restoration of adrenal function.
As glucocorticoids inhibit antigen – antibody reaction but not antibody formation, the treatment of acute or latent infectious conditions should only be undertaken with appropriate antibiotic cover.

Dosage and Administration
As Voren® is a microcrystalline suspension, and is well tolerated locally; parenteral routes of administration may be employed at the following dosages:
Horses:
10-15 mL intramuscularly
Foals:
3-5 mL intramuscularly
Cats/Dogs:
1-2 mL intramuscularly or subcutaneously

Doses into the synovial cavities should be reduced depending on the size of the joint cavity involved. Should a second injection be necessary, this may be given on about the fifth day after the first treatment, as Voren® has a length of action of four days.

WITHHOLDING PERIOD
DO NOT USE in horses that may be used for human consumption.

First Aid

If poisoning occurs, contact a doctor or Poisons Information Centre. *Phone Australia 131126.*

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

Storage
Store at 25° C (Air Conditioning). Do not freeze.

Presentation
Aqueous suspension 50 mL bottle

Distributed by:

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APVMA 35959/100037

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