UBRICINA SECADO L.A.

Q-0209-125

Local suspension

Antimastitic

Formula

Cada 6 g contienen	
Ceftiofur clorhidrato	500 mg
Dexametasona fosfato of sodio	1 mg
Excipiente c.b.p.	6 g

Uso in especies

Cattle producers of meat and milk in drying period.

INDICATIONS AND USES

For the preventive treatment of clinical, subclinical, acute or chronic mastitis, caused by Gram-positive and Gram-negative bacteria, including beta-lactamase-producing strains in cattle during the drying period.

CLINICAL PHARMACOLOGY

- PHARMACOKINETICS

After its administration, it is rapidly metabolized to desfloyl ceftiofur, which contains a sulfhydryl group and furoic acid. The desfuroil ceftiofur contains an intact β-lactam ring and is the main microbiologically equipotent active residue to ceftiofur against most of the pathogens that affect domestic animals. The concentrations in the plasma reached a maximum of 2.85 ± 1.11 mg / ml two hours after the injection, and decreased during the following 22 hours to reach 0.64 ± 0.14 mg / ml at 24 hours after treatment. The concentrations in the lochia or fluids reached a maximum concentration of 0.98 ± 0.25 mg / g at 4 hours after the injection, and decreased 0.22 ± 0.21 mg / g at 24 hours after treatment. The serum level is determined by the binding to plasma proteins and the rate of renal elimination, the distribution of this is limited to extracellular fluids, while we find high concentrations in liver, kidney, intestine, bile, lymph and semen; penetrate well the pleural, pericardial and synovial fluids. Urinary concentrations are actively
extremely high, although they penetrate poorly in prostatic fluid. The elimination is almost completely through the renal pathway, through glomerular filtration and tubular secretion, which explains the high levels in urine, which exceeds blood values. It is metabolized at the hepatic level to desfuroryl ceftiofur as the primary metabolite and furoxic acid.
Dexamethasone is rapidly absorbed after administration. The maximum plasma concentrations are obtained after 1-2 hours. The duration of action of dexamethasone depends on the mode of application and the irrigation of the applied site. In the systemic circulation, dexamethasone weakly binds to plasma proteins, the portion not bound to proteins being active. The drug is rapidly distributed in the kidneys, intestines, liver, skin and muscles. Corticosteroids cross the placental barrier and are excreted in milk.
Dexamethasone is metabolized in the liver, causing inactive products that are eliminated in the urine. The elimination half-life is 2.8 to 3.5 hours and the biological half-life is 36 to 54 hours.

- PHARMACODYNAMICS:

The bacterial cell wall is fundamental for bacterial growth and development, and has a heteropolymer or peptidoglycan component that provides mechanical stability by virtue of its lattice structure. This peptidoglycan is composed of glucan chains that are branches
linear of two alternating amino sugars: the N-acetyl glucosamine and the N-acetyl muramic, and which are interlinked by peptide chains. The biosynthesis of this peptidoglycan involves about thirty bacterial enzymes and is generated in three phases, namely:
The formation of the precursor in the cytoplasm.
UDP acetylmuramyl-pentapeptide and UDP acetylglucosamine, to form a long polymer.
A transpeptidation reaction is generated, carried by a trasnpeptidase, bound to the cell membrane, giving as a final product the peptidoglycan.

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- PHARMACODYNAMICS:

In such a way that the action of ceftiofur consists of blocking the formation of the cell wall, inhibiting the action of transpeptidase, blocking the development of the mechanism of transpeptidation of the amino sugars, thus causing the death of the bacteria.
Glucocorticoids are natural hormones that prevent or suppress immune and inflammatory responses when administered in pharmacological doses. Free glucocorticoids easily cross the membranes of cells and bind to specific cytoplasmic receptors,
inducing a series of responses that modify the transcription and, therefore, the synthesis of proteins. These responses are the inhibition of leukocyte infiltration at the site of inflammation, interference with the mediators of inflammation and the suppression of immune responses. The anti-inflammatory action of glucocorticoids involves proteins inhibitors of phospholipase A2, called lipocortin. In turn, lipoproteins control the biosynthesis of a series of potent mediators of inflammation such as prostaglandins and leukotrienes.
Some of the responses of glucocorticoids are the reduction of edema and a general suppression of the immune response.

DOSE:

Cattle, one syringe (6 g) in each mammary gland to be treated.
Apply immediately after milking and disinfect the nipple sphincter; Give a gentle massage in the mammary gland for a better diffusion of the medication. It is recommended to seal the nipples.

ROUTE OF ADMINISTRATION:

Intramamaria

WARNINGS

Do not administer to animals sensitive to the ingredients of the formula.
Keep at room temperature to no more than 30 ° C, in a dry place protected from sunlight.
Do not leave it within the reach of children and pets.
Consult the veterinarian.

PRESENTATION:

Box with 24 syringes of 6 g each