For the use of Registered Veterinary Practitioner, Hospital or Laboratory

OSCINAP®

(Carboxymethyl cellulose Sodium & N-Acetyl Carnosine Eye Drops)

OSCINAP eye drops contains a combination of topical antioxidant & lubricants useful in the prevention of damage caused by the free radicals due to various etiology and formed during ocular surgery.

Composition:

Carboxymethylcellulose Sodium IP	0.3%w/v
N-Acetyl Carnosine	1%w/v
Glycerin IP	1%w/v
Boric acid IP	0.1%w/v
Benzyl Alcohol IP (as preservative)	0.1 %w/v
Sterile aqueous vehicle q.s	

Pharmacological action:
N-Acetyl-Carnosine (NAC) is a time-release form of the naturally occurring dipeptide L-carnosine - a powerful antioxidant and anti-glycating agent. This form of 1-carnosine has access to both the aqueous and lipid portions of the eye and can protect and even repair DNA damage. Glycerin moisturizes and soothes dry, and irritated eyes. Carboxy methylcellulose acts as a demulscent.

Clinical Efficacy:
Biochemistry (Mosc). 2000 May;65(5):588—98.

The natural histidine—containing dipeptide N^{α} — acetylcarnosine as an antioxidant for ophthalmic use.
Babizhayev MA,YermakovaVN, SemiletonA, DeyevAI. Innovative Vision Products Inc., County of New Castle, Delaware 19810, USA.

The naturally occurring compound N^{α}-acetylcarnosine is proposed as a prodrug of L-carnosine that is resistant to enzymatic hydrolysis by carnosinase. Eyes of rabbits were treated with 1% N^{α}-acetylcarnosine, L-carnosine, or placebo and extracts of the aqueous humor from the anterior eye chamber were analyzed for imidazole content by reverse-phase analytical high performance liquid chromatography (HPLC) and thin-layer (TLC) and ion-exchange chromatographic techniques. Topical administration of pure L-carnosine to the rabbit eye did not lead to accumulation of this compound in the aqueous humor over 30 min in concentration exceeding that in the placebo-treated matched eye. N^{α}-acetylcarnosine showed dose-dependent hydrolysis in its passage from the cornea to the aqueous humor, releasing L-carnosine after 15-30 min of ocular administration of the prodrug in a series of therapeutic modalities: instillation < or = subconjunctival injection < or = ultrasound-induced phoresis. Different treatment techniques showed excellent toleration of 1%Nalpha-acetylcarnosine by the eye. Once in the aqueous humor, L-carnosine might act as an antioxidant and enter the lens tissue when present at effective concentrations (5-15 mM). The advantage of the ophthalmic prodrug N^{α}-acetylcarnosine and its bioactivated principle L-carnosine as universal antioxidants relates to their ability to give efficient protection against oxidative stress both in the lipid phase of biological membranes and in aqueous environments. N^{α}-acetylcarnosine is proposed for treatment of ocular disorders that have a component of oxidative stress in their genesis (cataracts, glaucoma, retinal degeneration, corneal disorders, ocular inflammation, complications of diabetes mellitus, and systemic diseases).

Clin Chim Acta. 1996 Oct 15;254(1):1-21 .

N-Acetyl carnosine is a prodrug of L-carnosine in ophthalmic application as antioxidant.

Babizhayev MA,YermakovaVN, Sakina NL, Evstigneeva RP, Rozh kova EA, Zheltukhina GA. Moscow Helmholtz Research Institute of Eye Diseases, Russian Federation.

The naturally occurring compound N-Acetyl carnosine (NAC) is proposed as the prodrug of L-carnosine (C) resistant to enzymatic hydrolysis by human serum carnosinase. Rabbit eyes were treated with 1% NAC, C or placebo and extracts of the aqueous humor from the anterior eye chamber were analyzed for imidazole content by reverse phase analytical high performance liquid chromatography (HPLC), thin-layer (TLC) and ion-exchange chromatographic techniques. The topical administration of pure C to the rabbit eye did not lead to accumulation of this compound in the aqueous humor over 30 min in concentration exceeding that in the placebo-treated matched eye. NAC showed dose-dependent hydrolysis in its passage from the cornea to the aqueous humor, releasing C after 15.30 min of ocular administration of prodrug in a series of therapeutical modalities: instillation < or = subconjunctival injection < or = ultrasound induced phoresis. Different treatment techniques showed excellent toleration of 1% NAC by

the eye. Once in the aqueous humor, 0 might act as an antioxidant and enter the lens tissue when present at effective concentrations (5-15 mmo1/1).The advantage of the ophthalmic prodrug NAC and its bioactivated principle C as universal antioxidants relates to their ability to give efficient protection against oxidative stress both in the lipid phase of biological membranes and in an aqueous environment

NAC is proposed to treat ocular disorders, which have the component of oxidative stress in their genesis (cataracts, glaucoma, retinal degeneration, corneal disorders, ocular inflammation, complications of diabetes mellitus, systemic diseases).

Dosage: 1 -2, Drop 3 to 4 times in a day in effected eye or as directed by Veterinarian.

Oscinap available in sale pack of 1 0m| vial.

Storage: Store in a cool, dark & dry place. Below 25"C. Do not allow to freeze.

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Shaping the Future

SAVA HEALTHCARE LIMITED
Plot No. 507-B to 512 GIDC Estate,
Wadhwan City – 363035, Surendranagar,
Gujarat, India
www.savavet.com