

NEW ZEALAND DATA SHEET

VERGO 16

Betahistine dihydrochloride Tablet 16 mg



Presentation

White, approximately 8.5mm, round flat bevel edged tablet marked "**BH**" on one side and breakline on the other.

16

Uses

Pharmacodynamics

The mechanism of action of betahistine is not known. Pharmacological testing in animals has shown that the blood circulation in the striae vascularis of the inner ear improves, probably by means of a relaxation of the precapillary sphincters of the microcirculation of the inner ear.

In further animal pharmacological studies, betahistine was found to have weak H₁ receptor agonistic and considerable H₃ antagonistic properties in the CNS and autonomic nervous system. Betahistine was also found to have a dose dependent inhibiting effect on spike generation of neurons in lateral and medial vestibular nuclei. The importance of this observation in the action against Ménière's syndrome or vestibular vertigo, however, remains unclear.

Pharmacokinetics

In man, orally administered doses of betahistine dihydrochloride are rapidly and completely absorbed from the gastrointestinal tract. The drug is rapidly metabolised to one major metabolite - 2-pyridylacetic acid - and excreted in the urine. Studies with radio-labelled betahistine have demonstrated a plasma half life of 3.4 hours and a urinary half life of 3.5 hours for the radio-label. Urinary excretion of the label was about 90% complete within 24 hours of administration.

Indications

Ménière's syndrome as defined by the following core symptoms:

- vertigo (with nausea/vomiting)
- hearing loss (hardness of hearing)
- tinnitus

Dosage and Administration

The recommended starting dose is 8-16 mg taken three times a day. The maximum recommended daily dose is 48 mg.

The tablets may be taken with or without food. However, if gastrointestinal upset occurs, it is recommended that the tablets be taken with meals.

The dosage should be individually adapted according to the response. Improvement can sometimes only be observed after a couple of weeks of treatment.

Contraindications

VERGO 16 (betahistine dihydrochloride) Tablets are contraindicated as follows:

- during pregnancy and lactation
- in children less than 18 years
- in patients suffering from phaeochromocytoma
- in patients with active peptic ulcer or a history of this condition
- in patients with hypersensitivity to any component of the product (see FURTHER INFORMATION).

Warnings and Precautions

Patients with bronchial asthma need to be carefully monitored during therapy.

Caution should be taken in the treatment of patients receiving antihistamines (see INTERACTIONS).

Carcinogenicity/ Mutagenicity

Studies in animals are inadequate or may be lacking, but available data show no evidence of an increased occurrence of foetal damage.

Impairment of Fertility

No animal data is available on the carcinogenic or mutagenic potential of betahistine.

Use in Children

Due to lack of clinical experience, betahistine dihydrochloride should not be used in children less than 18 years (see CONTRAINDICATIONS).

Use in Pregnancy

Category B2

Betahistine dihydrochloride should not be used during pregnancy (see CONTRAINDICATIONS) since there is insufficient data on the use of this drug during pregnancy to evaluate possible harmful effects.

Studies in animals are inadequate or may be lacking, but available data show no evidence of an increased occurrence of foetal damage.

Use during Lactation

Betahistine dihydrochloride should not be used during lactation (see CONTRAINDICATIONS).

Effects on Ability to Drive and Use Machines

Betahistine is presumed to be safe or unlikely to produce an effect on the ability to drive or use machinery.

Adverse Effects

Most of the reported adverse reactions pertain to the skin, gastrointestinal tract, body as a whole, nervous system, respiratory system and cardiovascular system.

Events are listed within body systems and categorised by frequency according to the following definitions:

Common (frequency ≥ 1 and <10 %)

Uncommon (frequency $\geq 0.1\%$ and <1 %)

Rare (frequency $\geq 0.01\%$ and < 0.1 %)

Very rare (frequency < 0.01 %)

Skin and subcutaneous tissue disorders:	<i>Rare:</i> various types of rash, pruritis and urticaria/angioneurotic oedema. These reactions are probably related to the histamine like structure of betahistine. There was a single case of Stevens Johnson syndrome.
Body as a whole:	<i>Common:</i> headache <i>Rare:</i> tiredness and malaise.
Gastrointestinal system:	<i>Rare:</i> nausea, dyspepsia, vomiting, diarrhoea, and epigastric pain have been reported. These symptoms were usually mild. Gastrointestinal disturbances may be relieved by reducing the dose or by taking betahistine with meals.
Nervous system:	<i>Rare:</i> dizziness <i>Very rare:</i> convulsions, somnolence, confusion and hallucinations. Some of these symptoms may also be observed as part of the disease condition and are usually resolved without changes to the treatment schedule. Patients with neurological events usually presented with confounding factors.
Cardiovascular system:	<i>Very rare:</i> vasodilation, postural hypotension and tachycardia.
Respiratory system:	<i>Very rare:</i> dyspnoea, asthma and bronchospasms (see WARNINGS and PRECAUTIONS)
Immune system disorders	Hypersensitivity reactions, e.g. anaphylaxis have been reported

Interactions

An antagonism between VERGO 16 and antihistamines could be expected on a theoretical basis. However, no such interactions have been reported.

Overdosage

Symptoms: There have been a few cases of overdosage reported. Although in most cases no overdose symptoms were reported, some patients have experienced mild to moderate symptoms of overdosage including nausea, dry mouth, epigastric pain and sleepiness at doses above 200 mg. A case of convulsion was reported at a dose of 728 mg. In all cases recovery was complete.

Treatment: Treatment should include standard supportive measures.

For further advice on management of overdose please contact the National Poisons Information Centre (0800 POISON or 0800 764 766).

Pharmaceutical Precautions

Store below 25°C. Protect from light.

Medicine Classification

Prescription Medicine.

Package Quantities

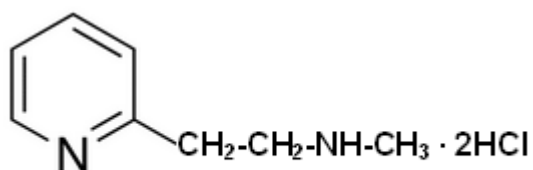
Bottles of 100 tablets.
Blister packs of 25 tablets and 84 tablets.

Not all pack sizes may be marketed.

Further Information

Chemical Structure

Betahistine dihydrochloride is chemically identified as 2-[2-(methylamino)ethyl]pyridine dihydrochloride. Chemically, betahistine has a close resemblance to histamine. It has the following chemical structure:



betahistine dihydrochloride

CAS NO. 5579-84-0 MW= 209.1

Description

Betahistine dihydrochloride is a white to almost white crystalline powder, which is very hygroscopic. It is very soluble in water, freely soluble in methanol and 96% ethanol, and slightly soluble in isopropanol. The pKa values are 3.5 and 9.7.

Excipients

Each VERGO 16 tablet also contains microcrystalline cellulose, mannitol, citric acid monohydrate, colloidal silicon dioxide and purified talc.

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