

Doxylamine

Updated: January 16, 2017.

OVERVIEW

Introduction

Doxylamine is a first generation antihistamine that is used for symptoms of allergic rhinitis and the common cold and as a short acting sedative. Doxylamine has not been linked to instances of clinically apparent acute liver injury.

Background

Doxylamine (dox il' a meen) is a first generation antihistamine that is used to treat the symptoms of allergic rhinitis and the common cold, including sneezing, cough, runny nose, watery eyes and itching. Because of its sedating side effects, it is also used as a mild sleeping aid and sedative. Doxylamine belongs to the ethanolamine class of antihistamines (with clemastine and dimenhydrinate) and was approved for use in the United States in 1948. It is still widely used today, largely in combination with other agents such as dextromethorphan, pseudoephedrine, aspirin and acetaminophen in over-the-counter products for relief of symptoms of the common cold and allergic rhinitis. Representative brand names of products that include doxylamine include Alka-Seltzer Plus, Night Time Cold/Flu Relief, NyQuil, and Sleep Aid. The recommended adult oral dose is 25 to 50 mg. Common side effects include sedation, impairment of motor function, confusion, dizziness, blurred vision, dry mouth and throat, palpitations, tachycardia, abdominal distress, constipation and headache. Antihistamines can worsen urinary retention and glaucoma.

Hepatotoxicity

Despite widespread use over many decades, doxylamine has not been linked to liver test abnormalities or to clinically apparent liver injury. The reason for its safety may relate its short half-life and limited duration of use.

Likelihood score: E (unlikely to be a cause of clinically apparent liver injury).

References on the safety and potential hepatotoxicity of antihistamines are given together after the Overview section on Antihistamines.

Drug Class: [Antihistamines](#)

PRODUCT INFORMATION

REPRESENTATIVE TRADE NAMES

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Doxylamine – Generic, Sleep Aid®, Unisom®

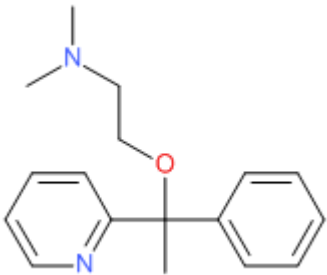
DRUG CLASS

Antihistamines

COMPLETE LABELING

Product labeling at DailyMed, National Library of Medicine, NIH

CHEMICAL FORMULA AND STRUCTURE

DRUG	CAS REGISTRY NUMBER	MOLECULAR FORMULA	STRUCTURE
Doxylamine	469-21-6	C ₁₇ H ₂₂ N ₂ O	 The chemical structure of Doxylamine is shown. It consists of a central carbon atom bonded to a methyl group (represented by a vertical line), a phenyl ring (represented by a hexagon with a circle inside), and a 2-pyridyl ring (represented by a hexagon with a nitrogen atom at the bottom). This central carbon is also bonded to an oxygen atom, which is part of a propyl chain ending in a dimethylamino group (represented by a nitrogen atom with two methyl groups).