



Dicyclomine

Updated: July 7, 2017.

OVERVIEW

Introduction

Dicyclomine is an anticholinergic agent used to treat gastrointestinal conditions such as acid peptic disease and irritable bowel syndrome. Dicyclomine has not been implicated in causing liver enzyme elevations or clinically apparent acute liver injury.

Background

Dicyclomine (dye sye' kloe meen) is synthetic tertiary amine, antispasmodic and anticholinergic agent which inhibits the muscarinic actions of acetylcholine on autonomic nerve endings, decreasing gastrointestinal secretions and intestinal motility. Dicyclomine has broad activity against muscarinic acetylcholine receptors, but has been used largely for gastrointestinal conditions including peptic ulcer disease and gastrointestinal conditions associated with pain and spasm. Dicyclomine was approved for use in the United States for the treatment of peptic ulcer disease in 1996, but is now more commonly used as an antispasmodic to treat irritable bowel syndrome. Dicyclomine is available in capsules and tablets of 10 and 20 mg generically and under the brand name Bentyl. Oral syrups and solutions for injection are also available. The typical oral dose in adults is 10 to 20 mg four times daily. Common side effects are those of parasympathetic stimulation and include dryness of the mouth and eyes, decreased sweating, headache, visual blurring, constipation, urinary retention, anxiety, restlessness and delusions. Anticholinergic agents can precipitate acute narrow angle glaucoma and acute urinary retention.

Hepatotoxicity

Like other anticholinergic agents, dicyclomine has not been linked to episodes of liver enzyme elevations or clinically apparent liver injury. The metabolism of dicyclomine is not well defined but it is likely metabolized by the liver.

References on the safety and potential hepatotoxicity of anticholinergics are given together in the Overview section on Anticholinergic Agents.

Drug Class: [Anticholinergic Agents](#)

PRODUCT INFORMATION

REPRESENTATIVE TRADE NAMES

Dicyclomine – Generic, Bentyl®

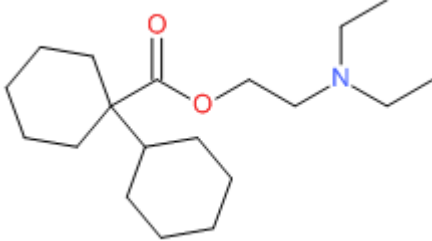
DRUG CLASS

Anticholinergic Agents

COMPLETE LABELING

Product labeling at DailyMed, National Library of Medicine, NIH

CHEMICAL FORMULA AND STRUCTURE

DRUG	CAS REGISTRY NUMBER	MOLECULAR FORMULA	STRUCTURE
Dicyclomine	77-19-0	C ₁₉ -H ₃₅ -N-O ₂	 The chemical structure of dicyclomine is shown. It consists of a bicyclic system of two fused six-membered rings (cyclohexane rings) sharing a single carbon atom. This carbon atom is also bonded to a carbonyl group (C=O) and an oxygen atom. The oxygen atom is part of an ester linkage to a propyl chain, which is further substituted with a diethylamino group (N(CH ₂ CH ₃) ₂).