

Division of Pediatric Emergency Medicine
Saint Louis University School of Medicine
Saint Louis, Missouri

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**REMEMBER ATROPINE FOR
“KILLER B’S”**



To the Editor:

With great interest we read the article from Sercan and Selahattin titled “Respiratory failure due to plant poisoning: *Nicotiana glauca* Graham” in the latest issue of *The Journal of Emergency Medicine* (1). Anabasine is an alkaloid found in the plant *Nicotiana glauca* and is chemically similar to nicotine. Toxicity manifests as a cholinergic syndrome that includes weakness, hypertension, tachycardia, convulsions, and muscle fasciculations, due to overstimulation of nicotinic acetylcholine receptors in the central and peripheral nervous system. However, prolonged depolarization at the receptor diminishes the responses and results in hypotension, bradycardia, paralysis, and coma (2). We are not informed about pupil size nor occurrence of bradycardia and hypotension when the patient deteriorates. In that case, atropine can be used for treatment of bradycardia. The authors describe some symptoms that may also indicate muscarinic overstimulation (vomiting, salivation, and bronchorrhea). Muscarinic symptoms can be remembered by the mnemonic DUMBELS, which is an acronym

for Diarrhea, Urination, Miosis, Bronchospasm/bronchorrhea/bradycardia, Emesis, Lacrimation, and Salivation/sweating/secretion. Atropine is a muscarinic agonist and is able to reverse muscarinic symptoms. Atropine is especially useful when facing high-risk symptoms like bronchorrhea and bradycardia (killer B’s). Although treatment in this case was supportive, please remember atropine as an antidote, especially when confronted with a cholinergic crisis with possible signs of muscarinic symptoms, including the killer B’s!

Tycho J. Olgers, MD
Jan C. Ter Maaten, MD, PHD
Department of Internal Medicine
University Medical Center Groningen
Groningen, Netherlands

Daan J. Touw, PHARM.D, PHD
Department of Clinical Pharmacy and Pharmacology
University Medical Center Groningen
Groningen, Netherlands

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