



Letter to the Editor: "Recreational abuse with benzydamine hydrochloride (tantum rosa)"

Jacek Sein Anand, Magdalena Lukasik – Głębocka & Roman Paweł Korolkiewicz

To cite this article: Jacek Sein Anand, Magdalena Lukasik – Głębocka & Roman Paweł Korolkiewicz (2007) Letter to the Editor: "Recreational abuse with benzydamine hydrochloride (tantum rosa)", *Clinical Toxicology*, 45:2, 198-199, DOI: [10.1080/15563650600981210](https://doi.org/10.1080/15563650600981210)

To link to this article: <https://doi.org/10.1080/15563650600981210>



Published online: 07 Oct 2008.



Submit your article to this journal [↗](#)



Article views: 7775



View related articles [↗](#)



Citing articles: 3 View citing articles [↗](#)

LETTER TO THE EDITOR

Recreational abuse with benzydamine hydrochloride (tantum rosa)

To the Editor:

Use of illicit and atypical drugs by young people is a burgeoning cultural trend. Such recreational drug use is associated with several medical complications, both acute and long lasting (1). We describe a case involving a 22-year-old man with a history of cannabinoid and alcohol use who was admitted to the clinic after ingesting 500 mg of benzydamine hydrochloride (Tantum Rosa, a sachet for vaginal douche, 500 mg). About two hours before admission he drank one sachet of Tantum Rosa (500 mg of benzydamine for vaginal application) dissolved in about 250 ml of water. At the time of admission the patient was conscious but disoriented. His blood pressure was 120/70 mmHg, heart rate was 96 beats/minute, and respiratory rate was 18 breaths/minute. His evaluation revealed hyper-reactivity, excitation, visual hallucinations, and muscle weakness (especially of the lower limbs). Serum electrolytes, glucose, creatinine, creatine phosphokinase, bilirubin, complete blood count, arterial blood gases, and hepatic transaminases were within the normal ranges. Toxicological analysis found no alcohol, amphetamines, opiates, or cannabinoids. Treatment was symptomatic and supportive. The hallucinations, excitation, and hyper-reactivity lasted for about 10 hours; muscle weakness resolved after 48 hours of hospitalization.

Our patient experimented with a potentially new substance of abuse. He found information about hallucinogenic action of benzydamine on the Internet and decided to try it. He refused to disclose the particular website. This was the first time he had used benzydamine.

Benzydamine hydrochloride (CAS nr 132–69–4) is an indolic, nonsteroidal antiinflammatory drug (NSAID) currently available as mouthwash, aerosol, dermal cream, vaginal douche, pills, and optic drops preparations (2,3). Unlike other NSAIDs, it does not inhibit cyclooxygenase or lipooxygenase, and is not ulcerogenic. Benzydamine has an affinity for membranes and shows membrane-stabilizing properties with local anesthetic effects. It inhibits phagocyte degranulation and aggregation, production of reactive oxygen species by phagocytes, and leukocyte adhesion to vascular endothelium (3). Benzydamine also

has antithrombotic properties, reduces platelet activating factor (PAF), and inhibits tumor necrosis factor (TNF) (3,4) properties. Benzydamine is well absorbed from the GI tract and has an elimination half-life of about 13 hours (5). The medical literature on acute benzydamine overdose is limited. A 6-year-old girl developed hallucinations after an oral dose of 500 mg of benzydamine and recovered spontaneously (2). Eggers described six children with reversible visual hallucinations after exposure to different drugs, including benzydamine (6). The exact mechanism of action for the hallucinations induced by benzydamine hydrochloride is unknown. This effect may be connected with intensifying the potentials evoked by optic stimulation in the visual area when an intracortical impulse propagation is inhibited (6). Other hypothetical causes could be a loss of rational control of reality or inhibited brain stem control of sensory stimuli originating in the periphery (6).

Patients with hallucinations and negative toxicological screening tests should be queried about other drugs or chemicals that they have used to get “high.”

Jacek Sein Anand, M.D., Ph.D.

*First Clinic of Internal Diseases and Acute Poisonings
Medical University of Gdańsk
80-211 Gdańsk, ul. Debinki 7
Gdańsk, Poland*

E-mail: jsanand@amedec.amg.gda.pl

*Magdalena Lukasik – Głębocka
Clinic of Toxicology and Internal Disease
Hospital Poznań – Jeżyce
Poznań, Poland*

*Roman Paweł Korolkiewicz
Department of Pharmacology
Medical University of Gdańsk
Gdańsk, Poland*

References

1. Ricaurte GA, McCann UD. Recognition and management of complications of new recreational drug use. *Lancet* 2005; 365:2137–2145.

2. Gomez-Lopez L, Hernandez-Rodriguez J, Pou J, Noque S. Acute overdose due to benzydamine. *Human Experimental Toxicology* 1999; 18:471–473.
3. Muller-Peddinghaus R. Neue pharmakologische und biochemische Befunde zum Wirkmechanismus des nicht—steroidalen Antiphlogistikums Benzydamin. Eine Synopsis. *Arzneimittelforschung* 1987; 37:635–645.
4. Guglielmotti A, Aquilini L, Rosignoli MT, Landolfi C, Soldo L, Coletta I, Pinza M. Benzydamine protection in a mouse model of endotoxemia. *Inflammation Research* 1997; 46:332–335.
5. Chasseaud LF, Catanese B. Pharmacokinetics of benzydamine. *International Journal of Tissue Reaction* 1985; 7:195–204.
6. Eggers C. Nichtdelirante Intoxikationspsychosen im Kindesalter. *Zeitschrift für Kinderheilkunde* 1975; 119:71–86.