Emerging Designer Drug Monograph

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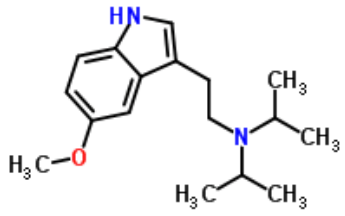
Drug Name: 5-MeO-DIPT

Synonyms: 5-Methoxy-N,N-Diisopropyltryptamine, N-Isopropyl-N-[2-(5-methoxy-1H-indol-3-yl)ethyl]-2-propanamine, 5-ethoxy-diisopropyltryptamine, Foxy Methoxy

Structure:



Formula: $C_{17}H_{26}N_2O$

Molecular Weight: 310.9 g/mol

Pharmacological Drug Class: 5-MeODIPT is a hallucinogenic tryptamine (1).

Metabolism: There are two metabolites of 5-MeO-DIPT that are widely recognized; 5-hydroxy-N,N-diisopropyltryptamine (5-OH-DIPT) and 5-methoxy-N-isopropyltryptamine (5-MeO-NIPT) (2). There are three other metabolites that have bee reported; 5-methoxy-diisopropyltryptamine-N^0-oxide (5-MeO-DIPT-N'-oxide), 5-methoxy-isopropyltryptamine (5- MeO-IPT) (1) and 6-hydroxy-5-methoxy-N,N-diisopropyltryptamine (6-OH-5-MeO-DIPT) (4). Metabolites 5-MeO-IPT and 5-OH-DIPT have been detected in urine samples (1) along with 5-MeO-NIPT (2). The 5-MeO-DIPT metabolic pathways are theoretical and still under research.

Blood Concentrations: Blood concentrations have been recorded from one known lethal case and a one non-lethal case. 5-MeO-DIPT and its two metabolites, 5-OH-DIPT and 5-MeO-NIPT, were identified by LC–MS in the lethal case study. The level of the three compounds in the blood sample was 0.412, 0.327 and 0.020 μg/ ml (2). In the non-lethal case, 5-MeO-DIPT was present in the blood at 0.14 μg/ ml (1).

Effects and Toxicity: It has been reported that this drug causes visual and auditory hallucinations, insomnia, paranoia, nausea, vomiting and formication. The effects occur in 20 to 30 minutes and last 3 to 6 hours (3). 5-MeO-DIPT in known to be taken in pill form or injected as an aqueous solution (2). The only lethal case revealed during the autopsy findings of periarteritis nodosa, involving the heart and liver, a myocardial ischemic lesion, leukocy- tosis, advanced pulmonary congestion and pulmonary alveo- lar haemorrhage and periprostatic bleeding (2).

Analysis: This drug chromatographs well with GC-MS and LC-MS without the need for derivatization. The parameters for analysis are outlined at the SWGDRUG link below.

References:

1. Wilson, M. J., McGeorge, F., Smolinske, S., Meatherall, R. (2005) A foxy intoxication. *Forensic Science International*, 148, 31 – 36. http://ac.els-cdn.com/S0379073804002324/1-s2.0-S0379073804002324-main.pdf?_tid=efa2eca0-2f9e-11e3-9e26-00000aacb360&acdnat=1381184722_b16441c5fddf03e9bbf330346cd806fb

2. Tanaka, E., Kamata, T., Katagi, M., Tsuchihashi, H., Honda, K. (2006) A fatal poisoning with 5-methoxy-N, N-diisopropyltryptamine, Foxy. *Forensic Science International*, 163, 152 – 154. http://ezproxy.arcadia.edu:2066/science/article/pii/S0379073805006298?np=y

3. Alatrash, G., Majhail, N. S., Pile, J. C. (2006). Rhabdomyolsis after ingestion of "Foxy," a hallucinogenic tryptamine derivative. *Mayo Clinic Proceeding*, 81(4), 550 - 551. http://www.mayoclinicproceedings.org/article/S0025-6196(11)61905-8/fulltext

4. Kamata, T., Katagi, M., Kamata H. T., Miki, A., Shima, N., Zaitsu, K., Nishikawa, M., Tanaka, E., Honda, K., Tsuchihashi, H. Metabolism of the psychotomimetric tryptamine derivative 5-methoxy-N,N-diisopropyltrytamine in humans: identification and quantification of its urinary metabolites. *Drug Metabolism and Disposition*, 34(3), 512

SWGDRUG Monograph
http://www.swgdrug.org/Monographs/5-METHOXY-N,N-DIISOPROPYLTRYPTAMINE.pdf

ChemSpider
http://www.chemspider.com/Chemical-Structure.133247.html?rid=5464c4be-7620-40e8-b1c9-d7bbd6b17ff2