

1-(3-TRIFLUOROMETHYLPHENYL)PIPERAZINE (TFMPP) ABUSE: AN INITIAL EXPERIENCE IN HONG KONG

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Objectives: To describe the clinical toxicity of patients with abuse of 1-(3-trifluoromethylphenyl)piperazine (TFMPP) in Hong Kong.

Methods: Retrospective case note review of all patients with abuse of TFMPP from the records of Hong Kong Poison Information Centre and Hospital Authority Toxicology Reference Laboratory before 31st December 2011.

Results: 7 patient attendances with analytically confirmed TFMPP exposure from September 2009 to December 2011 were identified. The clinical presentation and toxicological analysis of the patients are summarised in the Table:

Case no.	Sex/Age	Purported substances taken	Symptoms	Clinical findings	Urine toxicology#	Treatment
1	M/28	LSD, ecstasy, ketamine	Generalised discomfort, dyspnoea	Tachycardia, hypertension, mydriasis	LCMS/MS: TFMPP, ketamine, benzoylecgonine	Supportive
2	F/24	Unknown drug from a friend in a disco	Chest pain, nausea	Mydriasis	HPLC-DAD: TFMPP	Supportive
3	M/45	Unknown	Repeated convulsion	Convulsion, depressed conscious state, tachycardia, hypertension, mydriasis	HPLC-DAD: TFMPP, MDMA, ketamine, zopiclone	Intubation, benzodiazepine
4	F/24	Ecstasy in a disco	Intense generalised discomfort, feeling hot, dizziness, nausea	Tachycardia, mydriasis	Bedside test: benzodiazepine GCMS, LCMS/MS: TFMPP, phentermine	Intravenous fluid
5	M/34	Ecstasy in a private club. Cocaine and ketamine	Intense generalised discomfort not the same as his previous drug abuse experience. Feeling hot, palpitations, dry mouth	Tachycardia, hypertension, mydriasis	Bedside test: benzodiazepine, cocaine GCMS: TFMPP, cocaine, ketamine, MA, amphetamine and nimetazepam	Repeated doses of benzodiazepine
6	M/34	Ecstasy in a party. Cocaine	Intense generalised discomfort not the same as his previous drug abuse experience. Feeling hot	Hypertension	Bedside test: cocaine GCMS: TFMPP, ketamine, cocaine	Benzodiazepine
7	F/26	Suspected being drugged by others from alcoholic beverage in a disco	Visual hallucination. Intense generalised discomfort	Tachycardia, hypertension, mydriasis	Bedside test: benzodiazepine GCMS: TFMPP, ketamine, nimetazepam, ibuprofen	Intravenous fluid

#GCMS: Gas chromatography-mass spectrometry; HPLC-DAD: High-performance liquid chromatography-diode-array detection; LCMS/MS: Liquid chromatography-tandem mass spectrometry; MA: methamphetamine; MDMA: 3,4-methylenedioxy-N-methylamphetamine
Case no. 3 was found to have repeated convulsion requiring intubation and recovered without any residual disability after ventilator support for 5 hours. All other patients recovered within 24 to 36 hours with simple supportive treatment only.

Conclusions: TFMPP has landed the abusive drug scene in Hong Kong, as ecstasy mimics or date rape drugs. Patients with TFMPP exposure resulting in medical consultation most commonly presented with intense generalised discomfort, tachycardia, hypertension and dilated pupils. Repeated convulsion is also possible and may lead to significant morbidity. High index of suspicion is required to identify the patients, especially those supposedly took "ecstasy" but presented with atypical presentations and urine bedside test that was negative for MDMA.

