Drug-Facilitated Sexual Assaults in Italy

Preliminary data of the VARD project
(Violence And date Rape Drugs)

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Objective: Reports on cases of drug-facilitated sexual assault (DFSA) have increased internationally during the last twenty years (1). DFSA can be defined as a criminal offense in which victims are subjected to nonconsensual sexual acts, as they are incapacitated or unconscious by the effects of alcohol and/or drugs (2). The aims of the VARD project (Violence And date Rape Drug) are to evaluate the cases of DFSA in Italy and to identify their toxicological findings.

Methods: In this prospective study (2011-2014), patients seeking health care after sexual assault and for which the Pavia Poison Control Centre (PCC) is called from Emergency Departments (EDs) or from Sexual Assault Centres (SAC) are included. The inclusion criteria are: partial/complete amnesia for the alleged sexual assault, and/or (i) suspicion of covert drug administration, and/or (ii) voluntary intake of alcohol or drugs, and/or (iii) signs/symptoms of intoxication at admission to the EDs or SAC. For each included case, the PCC evaluates the characteristics of the DFSA and the clinical picture of the victim. The collected biological samples (blood and urine) are subsequently sent to the Institute of Legal Medicine (Catholic University of Sacred Heart) in Rome for toxicological analysis. The investigated substances varies from drugs such as benzodiazepines, antidepressants and GHB (Sodium Oxybate), to the new drugs of abuse such as synthetic cannabinoids and cathinones. The study was approved by the ethics committee of each centre that recruits patients: each patient signs the informed consensus.

Results: 65 patients were included from November 2012 to December 2013 (mean age 26 years; min 14, max 54). Thirty-seven patients (57%) were Italian and only one patient was a male. 45 patients (69%) reported the suspicion of covert drug administration; 8 patients (12%) had voluntarily assumed drugs of abuse. The kind of place where the event occurred is shown in figure 1. The assailant was a person already known by the victim in 31 cases (48%).

a) Way of administration. The way the substance was administered to the victim was unknown in 24 cases (37%); the suspect addition of the substance to the victim’s drink (drink spiking) was referred in 37 cases (57%). In the remaining 4 cases (6%) other modalities of administration were suspected. b) Memory effects. Twenty patients (31%) had no memory of the event, 37 (57%) had confused memories and only 8 (12%) were able to remember the event clearly. c) First medical evaluation. Ten patients (15%) presented with signs of intoxication at medical examination (sedation in 5 cases, headache in 2 cases, vomiting, midriasis, tachycardia and abdominal pain in 1 case, respectively). Forty-four patients (67%) did not show any type of injury (genital or other). d) Lab results. The results of the laboratory analyses performed are shown in figure 2. The samples were collected after a median of 24.5 ± 21.7 hours from sexual assault. The laboratory analyses resulted negative for all the substances investigated in 23 cases (35%). Ethanol (as ethanol in blood or as its urinary metabolite ethyl glucuronide) was found in 19 cases (29%); only ethyl glucuronide was found in urine in 7 cases (11%). The ingestion of ethanol resulted associated with benzodiazepines in 4 cases, with drugs of abuse in 5 cases (THC and cocaine in 2 cases and cocaine and methadone in 1 case, respectively), with venlafaxine and THC in 1 case and with benzodiazepines and cocaine in 1 case. The remaining 5 cases were positive only for benzodiazepines, THC, venlafaxine, zolpidem associated with clotiapine and benzodiazepines associated with MDMA in 1 case.

Conclusion: Ethanol results the substance more frequently detected in samples collected from victims of sexual assault recruited in the VARD project. The absence of injuries or signs and symptoms of intoxication at the time of the medical examination do not exclude a DFSA. GHB, known as the “date rape drug” par excellence, has never been found: this can be due more likely to its short half-life.


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