

PUBLIC HEALTH

Drug-facilitated date rape

Epidemiology: Date-rape drugs cause sedation and amnesia to the extent that their victims cannot resist or may not be aware of a sexual assault. About 25% of the 1400 women who contact the Canadian Sexual Assault Centre each year report that drugs were a factor in a rape.¹ Drug-facilitated rape is most commonly linked to the surreptitious administration of flunitrazepam (Rohypnol) or of a newer arrival, gamma hydroxybutyrate acid (GHB). Reports from the police and emergency departments suggest that use of these drugs, particularly GHB, in sexual assaults is increasing.² Routine tests to detect the drugs are not widely available, prompting one Ontario Liberal MPP to push the province to provide immediate testing for women who suspect they have been victims of date rape.

Well intentioned though that initiative may be, widespread testing is already available for the drugs most commonly used in date rape: alcohol, marijuana, benzodiazepines, cocaine, heroin and amphetamines. Any substance that is administered to lower sexual inhibition and enhance the possibility of unwanted sexual intercourse is potentially a date-rape drug. Of 2003 urine samples submitted by rape treatment centres across the United States within 72 hours of a suspected drug-

facilitated rape, GHB was detected in only 3% of the samples and flunitrazepam in less than 1%; alcohol was detected in 69% of the samples, marijuana in 18% and cocaine in 5%.³ Physicians should be aware of the mechanisms and clinical management of flunitrazepam and GHB intoxication, but they should also be aware that, when a drug-facilitated rape is suspected, alcohol is the substance most likely involved.

Clinical management: Flunitrazepam (Rohypnol, "roofies," "rope," the "forget pill") is an extremely potent benzodiazepine. It is used legally as an adjunct for general anesthesia in 62 countries in Europe, Africa, Latin America and the Middle East. It is not approved for general marketing as a therapeutic agent in Canada or the United States. Most of the tablets circulated in Canada are produced illegally in Mexico and Latin America. They are packaged in foil-backed, clear plastic blister packs and sold for about \$2 per 1- or 2-mg tablet. When dissolved in a drink, flunitrazepam is odourless and tasteless. It is rapidly absorbed and takes effect 20–30 minutes after ingestion.²

The drug produces symptoms similar to alcohol intoxication and should be suspected in any sexual assault involving a person who appears intoxicated or has amnesia. Physicians, in addition to adhering to standard rape protocols, should ensure that a urine specimen is analyzed for flunitrazepam metabolites. Provincial poison control centres (listed in the lavender section of the *Compendium of Pharmaceuticals and Specialties*) can advise on specimen collection and testing.² Unless the drug is taken with alcohol, overdoses are rarely fatal. The specific benzodiazepine antagonist flumazenil can be used to reverse coma induced by flunitrazepam.⁴

GHB ("liquid ecstasy," "grievous bodily harm," "scoop") is a metabolite of the inhibitory neurotransmitter gamma-aminobutyric acid. A central nervous

system depressant, it was developed as an anesthetic but has also been used to treat narcolepsy and alcohol withdrawal, and bodybuilders have used it to stimulate muscle growth. Inexpensive and easy to synthesize, it can be produced from common ingredients using recipes obtainable on the Internet. Available as a powder or a liquid, GHB is colourless and odourless but may have a distinct salty taste. Taken in small doses it lowers inhibition and instills feelings of calmness and euphoria. In higher doses it produces drowsiness, dizziness, amnesia, confusion, hallucinations, nausea and vomiting. Symptoms appear within 15 minutes of administration. Ingestion of 2 g results in a deep sleep and 4 g results in coma. If it is mixed in alcoholic beverages, the 2 sedatives are synergistic. There is no antidote for GHB; treatment is supportive.³

When GHB intoxication is suspected, a urine specimen (100 mL in a sterile container) should be collected. The half-life of GHB is 27 minutes, so a specimen collected more than 96 hours after the event may be of little value. If the assault occurred within the previous 24 hours, blood should also be collected and refrigerated in a grey-top tube containing sodium fluoride and potassium oxalate.³

Prevention: Precautions to avoid drug-facilitated rape include drinking beverages slowly, keeping an eye on and mixing one's own drinks, watching as the drink is poured and obtaining a fresh one after leaving the drink unattended (e.g., after dancing). — *Erica Weir, CMAJ*

References

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2. Schwartz R, Milteer R, LeBeau M. Drug-facilitated sexual assault. *South Med J* 2000;93:558-61.
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Order a new drink after dancing