Evidentiary Problems in Drug-Facilitated Sexual Assault Cases

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“Truisms” About Date Rape That Aren’t True

- Date rape is partly the victim’s fault – She (usually it is a she) shouldn’t have gotten into that situation

- Date rape is not as bad as other types of rape since the victim knew her assailant – “Date rape” is too nice a term for what amounts to drug-facilitated sexual assault

- These events always involve the same three drugs – alcohol, Rohypnol® ("Roofies"), GHB – Any CNS depressant will work and even stimulants and hallucinogens have been used
Representative Statistics on Date Rape

• Koss and co-workers studied college age women over a 1-year period

• 15.4% reported experiencing acts meeting the legal definition of rape

• Additional 12.1% reported one or more attempted rapes

• Another study showed 1 in 12 young men admitting acts meeting the legal definition of rape in the prior year

• A study of Australian women showed 18% were victims of sexual violence in the prior year, half more than once. Only 30% were reported to police. 68% involved assailants known to the victim.

• Study of drug facilitated sexual assault showed over 50% of acquaintance rapes involved drugs or alcohol

• 54% of other date rape drugs were administered via alcoholic beverages
CNS Depressants Encountered in Date Rape

- Alcohol (ethyl alcohol, ethanol) in any form
- Benzodiazepines: Valium (diazepam), Librium (chlordiazepoxide), Xanax (alprazolam), Halcion (triazolam), Serax (oxazepam), Rohypnol (flunitrazepam), Dalmane (flurazepam), Tranxene (clorazepate), etc.
- Barbiturates: phenobarbital, butalbital, secobarbital, pentobarbital, butabarbital, etc.
- Non-Barbiturate Sedatives: Soma (carisoprodol), Equanil (meprobamate), Ambien (zolpidem), etc.
- Drugs of Abuse: GHB, GBL, 1,4-Butanediol, etc.
- Antidepressants and Antipsychotics: Too numerous to mention, but if they have a warning about driving a car, they can potentially be used in date rape
- Decongestants and other OTC drugs: diphenhydramine, doxylamine, pyrilamine, etc.
Pharmacology of Date Rape Drugs

- Alcohol – Metabolized at ~0.02%/hour. 29X more likely to be used in date rape than all others combined. Also main way other drugs are given to victim

- GHB, GBL, 1,4-BD: All convert in body to GHB. $t_{1/2} = 0.3-1.0$ hr. Gone from urine in 8-24 hr.

- Benzodiazepines: Convert in body to active metabolites. $t_{1/2} = 12-24$ hr. Last in urine in for 2-3 days.

- Diphenhydramine: Available OTC. $t_{1/2} = 3-14$ hr. Lasts in urine 2-3 days.
Symptoms and Effects of Low Level Intoxication with CNS Depressants

- Slowed and fuzzy thinking, initial loss of critical judgment
- Mild euphoria
- Talkativeness, sociability
- Greater emotional volatility
- Release of inhibitions
- Increased self-confidence
- Impending sensory-motor impairment
Symptoms and Effects of Intermediate Level Intoxication with CNS Depressants

- Major loss of critical judgment, perception of risks
- Impaired perception, memory and comprehension
- Loss of coordination, staggering, slurred speech, poor balance
- Decreased sensory response
- Exaggerated emotional states
- Disorientation, confusion, dizziness
- Drowsiness
Symptoms and Effects of High Level Intoxication with CNS Depressants

- Major deficiencies in thinking, reasoning and decision-making

- Inertia, stupor, sleep, “Passing Out”, unconsciousness, coma

- Nearly complete loss of motor control, inability to walk, talk or carry out other common physical activities

- Marked reduction in sensory response

- Vomiting, incontinence

- Slower heart rate, lowered blood pressure and body temperature

- Respiratory depression, death
Practical Problems in Investigating and Prosecuting Date Rapes

- Delayed reporting of the crime by the victim due to embarrassment or incomplete memory of the event -- Drug effects may have worn off and the drugs may even be non-detectable in the victim’s samples

- Amnesia by the victim concerning the entire event or important portions thereof

- Usually a lack of witnesses other than the participants, one or both of whom may have been impaired by drugs or alcohol

- Victim typically so helpless that the act produces few or no physical injuries, allowing perpetrator to claim it was consensual

- Death or prolonged coma of the victim a significant possibility
How Can Toxicology Help Law Enforcement?

- Documents exposure of the victim to foreign substance(s) – may tend to mitigate claims by the perpetrator that sex was consensual

- Blood or urine levels of drugs and/or metabolites may correlate with time of ingestion, dose and signs or expected symptoms of impairment

- Complements other evidence in the case, such as statements by the victim and witnesses, scene investigation, DNA, etc.

- Expert witness support at trial
How Can Law Enforcement Help Toxicology?

- Collect samples as soon as possible after event
- When in doubt, collect samples sooner, not later
- Collect as many sample types as feasible: urine, blood if possible, multiple samples if possible
- Use appropriate preservatives
- Use a laboratory that can handle a large spectrum drug screen and quantitate reliably
- Consult with laboratory, provide situational details to aid interpretation