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Regarding: Victim J.L.

Introduction:

I have been retained by the Fulton County District Attorney's Office to review a sexual assault investigation. My compensation is $325 per hour for review and opinion preparation. A fee of $500 per hour for testimony with a minimum of $500 to appear for court. Reasonable travel expenses are charged for air, hotel and rental car.

The primary purpose of this opinion is to determine whether Victim, JL, was able to give or withhold consent for sex and whether the defendants knew or should have known that JL was experiencing various levels of dissociation, amnesia, intoxication or a degree of mental or physical impairment that would render her unable to give or withhold consent for sex. As background, I will review knowledge of the mechanics of Drug Facilitated Sexual Assault (DFSA), the associated predatory drugs, the typical symptoms of intoxication and whether those signs and symptoms and circumstances are consistent or inconsistent with someone who was administered one or any of these drug as it relates to the victim in this particular case.

I have reviewed:

- Police reports Hartman PD
- Police reports - Atlanta PD
- Evidence PDF
- GBI Crime Lab
- Interview of JL at Grady Hospital - Atlanta PD
- Interview JL - Atlanta PD
- Video Surveillance - Allee PT2; Garage elevator three
- Phone downloads
- GBI - DNA results
- Interview - Bernard Sutton
- Interview - Tagese Wannore
- Medical records - JL - Grady Hospital
- Medical Records - JL - WMC
- TAP Receipt
- Massage Troll Screen Shot
- Cell phone dump
- Sprint's records on defendant's phone
- Search warrants

Reviewer's Background and Experience

I received a Doctor Pharmacy Degree from University of Southern California School of Pharmacy. I presently serve as the President of the California Chapter of the National Association of Drug Diversion Investigators. I serve as a consultant for the Department of Defense, training military Worldwide, law-enforcement and I have participated in various projects requested from as high as the Office of The President. I am the lead Instructor for the Department of Defense at their Regional Counterdrug Training Academies at their resident military bases throughout the country. I am an instructor for the California Narcotic Officers' Association and the International Chiefs' Police - Drug Recognition Experts (DRE). I am part of the core course for DRE for the California Highway Patrol Impaired Drivers' Unit Pre-School and Los Angeles Police Departments' Recertification DRE School. I have recertified hundreds of law enforcement officers in DRE throughout the country. I retired from the State of California where I worked as a peace officer investigating violations of state and federal laws and regulations relating to medical practitioners and allied health professionals. I headed a task force and educational organization known as the Professional Diversion Intelligence Network/Drug Enforcement Administration (PDIN/DEA). During that time I was involved in conducting hundreds of sexual misconduct and sexual assault investigations relating to the administration of drugs to facilitate these assaults. I have investigated, consulted in the investigations and supervised the investigations of hundreds of drug-facilitated sexual assaults (DFSA). Before, during and after my law enforcement career, I worked as a clinical pharmacist in Level One trauma centers and acute care hospitals in Los Angeles. I was involved in the assessment and treatment, under protocol, of numerous patients admitted for sexual assaults including those that were drug facilitated. I would be asked to evaluate the histories and symptoms of the patient to best determine what drug was used so that definitive treatment could be instituted based on the suspected drug or drugs. These treatments ranged from inducing emesis to maintaining the patient on life support. I have responded to hundreds of "Code Blue" resuscitations in the emergency rooms and throughout the hospitals where I was employed. While attending these "Code Blues", I was in charge of medication decisions as it related to advance life support. In the University setting, I was a Clinical Instructor of Pharmacy at the University of Southern California, School of Pharmacy where I was the preceptor of pharmacy students going through clinical rotations in the areas of acute-care medicine, burn intensive care, intensive care medicine, emergency medicine, and psychopharmacology.

While working as a clinical pharmacist, I would subjectively and objectively evaluate the appropriateness of drug therapy in acute care, intensive care, and psychiatric units, with regards the patient's clinical status, medical problems, lab, and other diagnostic procedures with consideration of significant drug interactions and drug lab interactions and possible adverse drug reactions. I evaluated the appropriateness of therapy in approximately 60+ patients per day

and under protocol, I would adjust drug regimens within these acute-care institutions. In the assessment of patients' clinical status, drug monitoring, and determining the effects of licit and illicit drugs, I would, at times, review medical texts and reputable worldwide medical literature to complete my assessments.

I have received numerous awards from various organizations for my work in drug education and investigations including, but not limited to, the International Conference on Transnational Organization Crime and Terrorism, the US Attorney's Office, the High-Intensity Drug Trafficking Area programs throughout the country, and the Mississippi Bureau Narcotic Enforcement. I received "Educator of the Year" from the National Association of Drug Diversion Investigators. I received the California Attorney Generals' "Certificate of Achievement", the highest award a California Peace Officer can receive for work in the field of Drug Enforcement and Diversion while heading the Professional Diversion Intelligence Network/Drug Enforcement Administration from then Attorney General Dan Lungren.

During my career as a peace officer, I have provided declarations, opinions, qualified, and testified as an expert on California Pharmacy Drug Laws, the Uniform Controlled Substance Act (both federal and state), controlled substances, dangerous drugs, prescribing of control substances based on community standards, prescribing on the Internet, and determining legitimate use of controlled substances in United States District Court, Municipal Court, Superior Court in the counties in Los Angeles, San Diego, Ventura, Santa Clara, San Mateo, Orange and a Grand Jury within the County of Los Angeles.

Drug Facilitated Sexual Assault Background:

The Drugs of Sexual Assault
- Alcohol--Still Number One
- Benzodiazepines in general - Alprazolam (Bar Juice), Clonazepam,
- Flunitrazepam (Roofies or Rohypnol)
- GHB or its "analogs" GBL and BD
- Other benzodiazepine specific receptor agonists (i.e. Ambien)
- Other sedative-hypnotics
- Barbiturates
- Muscle relaxants
- Antihistamines
- Animal tranquilizers - Ketamine
- Motion sickness/nausea prevention pills - Scopolamine
- Narcotic analgesic
- MDMA & hallucinogens

A variety of predatory drugs (more than 50) have been utilized to cause various levels of dissociation, amnesia, intoxication or a degree of mental or physical impairment that renders the targeted victim unable to give or withhold consent for

sex, or to be victimized by robbery, credit card fraud etc.

One such drug is gamma hydroxybutyrate (GHB). GHB abusers include partygoers (raves and clubs, frat parties, etc.)and others who desire its intoxicating and often out-of-body symptoms and lack of a hangover especially if taken alone, bodybuilders and other athletes who believe the myth that it is a great work out aid and growth hormone stimulator, the elderly who have been told it is an anti-aging substance, people suffering from depression who have been told it is an antidepressant, and strippers and others seek its ability to stimulate sexual behavior. GHB is not tasteless and is often described as a salty taste or just has on unpleasant taste, but may also be mask by suite or fruity drinks or simply undetected by an inexperienced person. Effects last basically 4 to 6 hours and the onset of impact is 5 to 30 minutes. The onset of effects can be somewhat gradual but is often abrupt. It is a liquid or powder that is easily slipped into a drink. It is a myth that people drugged by GHB or other drugs for purposes of sexual assault are always rendered unconscious. A victim may be unconscious all part or none of the time. To the individuals around them, someone on GHB can demonstrate a wide array of behavior. They may appear okay at some point, or just "drunk" comparable to alcohol, or behaving bizarrely or aggressively to falling down to comatose or even dead. The changes in behavior can be dramatic and sudden.

A victim may have a "passed out" or "blackout" experience and will likely not be able to tell the difference. Thus a victim will likely report "I passed out," but videos or other witnesses may show or describe them as functioning and yet the victim genuinely has no such recall, they may appear to even participate at various stages. In reality the key factors are the amnesia of fact, the inability to physically resist (successfully) or the inability to even verbally resist (they may recall wanting to scream or for thinking that they did but can't say for sure that they spoke audibly). Thus suspects typically claim nothing happened or that it was consensual.

Many of the 50+ drugs of DFSA are in the category of benzodiazepines, drugs that are utilized for anti-anxiety, muscle relaxants, sleep disorders, etc., and all of which can result in effects "desired" by a drug rapist such as amnesia, ataxia, intoxication, sleep, drowsiness, disinhibition, etc. other drugs utilize include the old barbiturates, sleeping pills, opiates, animal/human tranquilizers (including ketamine), diphenhydramine (Benadryl's primary ingredient, a common over-the-counter drug of choice), even some herbal products, etc. all of the drugs used in DFSA provide some array of these symptoms with variations as to how long until they take affect, how long the effects last, how they interact with alcohol, etc. all result in some degree and form of impairment that renders a victim unable to give or withhold consent to sexual activity and/or to fight off the assailant. Some drugs, such as GHB, can cause an out of body sensation where a victim may literally "see" oneself walking away and yet been able to control the event. They may "hear" a voice asking "how does that feel?" And yet have no body sensation

to account for the "feel."

GHB was first synthesized in 1960 as an experimental GABA analog, and was classified as a food and dietary supplement and sold in health food stores in early 1990. It was available in tablet, capsule and liquid forms. In late 1990, the FDA banned over-the-counter sales of GHB in the U. S. In 1999, the FDA issued warnings on the dangers of its precursor drugs GBL and 1,4-BD. In early 2000, GHB was federally reclassified as a Schedule 1 controlled substance. GBL and 1,4-BD are not scheduled, however, GBL is classified as a list 1 chemical and a controlled substance analog, while 1,4-BD is listed as a controlled substance analog. GHB can be clandestinely made and the ingredients are available in kit form over the internet. GHB is made from GBL and a base (e.g. lye/NaOH), the mixture is heated, and vinegar is added to reduce the pH. Acetone can then be added and the mixture dried, resulting in GHB powder. GBL and 1,4-BD are commercially available as industrial solvents and are used as ingredients in cleaners, solvents, paint removers, and engine degreasers. They are also sold as "natural supplements" over the Internet, and in some health food stores and gymnasiums, and are marketed as natural, non-toxic dietary supplements. GHB is a CNS depressant, sedative, anesthetic.

"Benzo" Family Members

- diazepam (Valium)
- clonazepam (Klonopin or Rivotril)
- temazepam (Restoril)
- bromazepam (Lexotan)
- alprazolam (Xanax)
- oxazepam (Serax)
- nitrazepam (Mogadon)
- flunitrazepam (Rohypnol, aka roofies)
- flurazepam (Dalmane)
- triazolam (Halcion)
- lorazepam (Ativan)
- midazolam (Versed)
- estazolam (ProSom)
- chlordiazepoxide (Librium)
- NOTE: Benzos range in strength from Valium (lowest) to Halcion (highest).

The class of drugs called benzodiazepines (often referred to as "Benzos") is made up of commonly prescribed tranquilizers, anti-anxiety, anti-seizure and muscle relaxing drugs that are basically central nervous system (CNS) depressants. There are at least 37 drugs in this category, though some are not approved for medical use in the US and thus lesser known in this country. Phenazepam (Zannie) and nimetazepam (Erimin), for example, are not utilized in the US but have shown up increasingly in US seizures and in some SAs. Phenazepam is a very long acting benzodiazepine (duration of action up to two and a half days!) sold illicitly in head shops and on the Internet. It is sold as an air

freshener, nimetazepam is a potent benzodiazepine similar in potency to rohypnol. It is the number one benzo in Malaysia for sleep, muscle relaxation, and anxiety.

Benzodiazepines have five primary effects:

--Hypnotic (tending to cause sleep)
--Anxiolytic (tending to reduce anxiety and produce relaxation; use as a pre-medication for surgical procedures)
--Anti-seizure (tending to reduce likelihood of seizures or convulsions; used in alcohol withdrawal)
--Muscle relaxant (tending to reduce muscle tension and related pain)
--Amnestic (tending to disrupt long and/or short term memory)

Each benzo causes these primary effects to varying degrees. Thus triazolam (Halcion) is a relatively strong hypnotic with a short onset of action (causing rapid induction of sleep), but others such as alprazolam, lorazepam and clonazepam are weaker as a hypnotics but more powerful as an anxiolytic, reducing anxiety. This difference determines what conditions they are most commonly prescribed to treat. Diazepam does however have a long half-life (half of the active drug leaves the body over a specific time) and the duration of action which includes active metabolites that linger and exert their actions for a prolonged period.

All Benzos can be utilized as DFSA drugs, especially when mixed with alcohol or other drugs.

Sedative-Hypnotics Drugs & Animal Tranquilizer

•GHB/analogs (dissociative)
•ketamine (Ketalar, Ketajet-dissociative)
•PCP (dissociative--not good sexual assault choice)
•meprobamate (Equanil or Miltown)
•zolpidem tartrate (Ambien) (Intermezzo)
•chloral hydrate (Noctec)
•ethchlorvynol (Placidyl)
•telazol (animal tranquilizer)

Ketamine

Ketamine is an anesthetic drug traditionally used widely in veterinary practices for surgery, and in human medicine as a battlefield anesthetic, in burn wards and in pediatrics. Unlike traditional anesthetic drugs, ketamine does not drop vital signs (heart rate, blood pressure), but has an intense pain block mechanism. This makes it extremely valuable in a battlefield environment where it is a life or death issue and in burn wards where blocking pain while debriding wounds is crucial. While used in veterinary clinics for surgery, where resuscitation equipment is at hand, many vets do not use it in the field (farm animal calls, for example) because of the risk that the patient simply stops breathing. Ketamine

notoriously causes flashbacks but has been used in pediatrics, children under five.

As abuse of ketamine grew in the rave and club scene, there appeared to be a draw back from using it in medicine, especially pediatrics and veterinary practices. Burglaries of vet clinics with nothing taken but the ketamine supply were often reported. But in recent years there has been renewed interest in ketamine for PTSD, depression, and in some countries even use by paramedics in the field. This will most likely result in increased access to ketamine as a DFSA drug.

Ketamine was used in a notorious club scene case many years ago. The suspect would have a straw filled with ketamine powder at the ready. He would suddenly push it toward the victim's face and blow, causing the natural reaction of sucking in and back, thus inhaling the powder blown into her face.

The Other Drugs
Muscle Relaxants
Carisoprodol (tradename Soma) is a muscle relaxant that is known to potentiate the effects of opiates. Thus is it possible to find both carisoprodol and a drug such as oxycodone or any other opiate in a toxicology report, especially in a voluntary user and possibly in a DFSA victim. One abuser noted: "I get like super drunk, for about 30 minutes to an hour. I get really confused, and it's hard to talk, and then I go into the 'soma coma.' Seriously, I can't move for like 20 minutes. (Meprobamate is a metabolite of carisoprodol and is also a skeletal muscle relaxant.)

Cyclobenzaprine (tradename Flexeril) This drug produces general relaxation to sedation but some report more serious effects, including hallucinations. It impairs thinking and reaction time and is intensified by alcohol. Common side effects of Flexeril may include drowsiness, dry mouth, fatigue, dizziness, and headache. Motion sickness/nausea prevention/sedative scopolamine (Transderm-Scop) which is used most often for motion sickness and postoperative nausea. The antihistamine diphenhydramine (Benadryl) also has significant depressant properties.

Sleeping Pills
Ambien - increasingly used, relatively short time in body (depending on testing protocols used), can cause sleepwalking, sleep driving episodes, much like GHB. And it can cause increased impaired balance, especially for older individuals, even when used legitimately.

Sonata & and other sleeping medication also work to facilitate sexual assault. There are now tests for all - Lunesta, Sonata, (All are Benzodiazepine Selective Receptor Agonists or BSRA's)

"Newer" Considerations
MDMA & comparable drugs
Hallucinogens
LSD
Mushrooms
PCP also embalming fluid or combo SPICE & bath salts, chloroform
Propofol, has been identified in abuse and rape cases. GHB/MDMA can result in what is perceived as hypersexual behavior by the victim. Individuals may be combative while on GHB. Victim may experience "burning" sensation in throat from "bad" GHB, made without adjusting pH level. There is a prescription precursor to GHB called sodium oxybate or Xyrem, which converts to GHB when ingested.

Another group of drugs considered to be predatory drugs is the category of hallucinogenic drugs such as LSD, MDMA (Ecstacy, aka Molly, which is a phenethylamine and an array of similar or related drugs (including approximately 180 drugs known as phenethylamines and tryptamines). While these drugs are less likely to cause unconsciousness, they can cause symptoms that render the victim unable to give or withhold consent. A person tripping on a drug like LSD, for example, may experience hallucinations taking them beyond reality and thus unable to adequately respond to really events and protect themselves or resist. MDMA is a synthetic, psychoactive drug that has similarities to both the stimulant and phentermine and the hallucinogen mescaline. It produces feelings of increased energy, euphoria, emotional warm and empathy towards others, and distortions in sensory and time perception. It enables people to be introspective and to open up to others; thus it was initially being used in marital, grief, cancer, and personal therapy before being made illegal. Part of the problem at that time was that therapist themselves were taking the drug along with their patients. Americas lonely teenagers find instant acceptance in any location. MDMA is an entactogen, increasing the senses, resulting in a touchy– feely reaction for many. This causes this innovation and can result in risky sexual behavior, unplanned, undesired sexual conduct that would not otherwise have taken place, especially for the person unknowingly given the drug. It can cause "eye flutters" (nystagmus), dehydration and seizures due to the increased body temperature, muscle spasms that they won't recall as painful if they recall them at all, agitation and other negative experiences for some. Even on Erowid.org, The pro drug website that caters to the drug – using community warnings regarding the use of MDMA: "Individual sensitivity varies widely. A small percentage of users seem to react with extreme sensitivity to MDMA and experience overly strong affects at normal doses, including hyponatremia, unconsciousness, seizures, and other serious medical problems." To the observer, the individual may simply see more energetic, outgoing, talkative and touchy – feely or even sensual. Not sensing pain normally, they may find it exciting to hang around the massive speakers at rave parties, "enjoying" The vibrations while people not taking the drug would find it impossible to remain there. They have reported things like, "I accidentally dropped my cigarette and burned my arm but it felt so good that I did it again."

Pupils are typically dilated which may or may not be noticed by others around them. The desired effects of MDMA typically last about five hours but the primary impairment last around 12 hours, followed by ongoing effects such as fatigue, serotonin drain, depression, etc. For a couple of days, resulting in a term "Suicide Tuesday". When an abuser ingests MDMA on the weekend, return to work or school on Monday they feel terrible there after. By Tuesday, they can be suicidal.

The term "Molly" actually referred to a different drug years ago but has now been popularized as representing the purest form of MDMA. Pills sold as ecstasy, represented as this drug, have always been a mixed bag. Some contain only MDMA plus nondrug filler or binding agent. A 300 mg pill usually would contain 100 to 175 mg of the drug. But often the pills were a little MDMA mixed with other drugs or even no MDMA at all but substitutes. It could be methamphetamine (for the stimulant) mix with LSD or PCP, etc. (for the hallucinogenic property). It could be simply a related drug such as MDA or any of the dozens of chemically related drugs. The various related drugs have similar properties chemically and in terms of effects may be more stimulating to various degrees or more hallucinogenic to various degrees and some even more likely to result in death. The claim that any product to be pure or uncut is often meaningless. A drug dealer is unlikely to sell it and tell the truth that it is really something else, or a mix product, or cut, etc. so users really have no clue what they are taking.

With every drug, illicit or licit, there is a range of expected reactions, a common theme. But there is always also a descending frequency of adverse or at least uncommon reactions. These often range down to even death. They are, for example, incidence of sleeping pills that rather than put one to bed will result for some people in bizarre, active behaviors. This is true even with prescription drugs, taken as prescribed, in therapeutic doses, without any other drug involved. The drug experience can be individualized. The person who is more sensitive to drug affects may have a more unusual or enhanced effect then the "norm." People who drug others may have no knowledge of that person's medical condition, other drugs they may be taking (whether prescription or recreational) or simply their sensitivity to drugs.

Drink dosing maybe done by a bartender in conjunction with intended rapist or by the subject directly, such as a person near the target individual at the bar or crowded tables. Drinks can be dosed easily by a person with a pill (or a powder from crushing a pill or a liquid from dissolving a pill or tablet or a drug are already in liquid form), A small vial, squeeze bottle or eye dropper in the palm of the hand as the person reaches beyond a drink, for example, at the bar while appearing to be reaching for a napkin, pretzels, etc. dosing is even easier when the suspect is actually with the victim, giving them immediate proximity to the drink and numerous opportunities to drug a drink or food. Dosing is seldom witnessed by those nearby as it is so easy to do and hiding methods (common items such as a vial or squeeze bottle for water/sports drink a bottle or other alcohol bottles, etc.) simply go unnoticed.

The Effects of Ecstasy:

Glossary of terms:
Dopamine: A neurotransmitter present in regions of the brain that regulate movement, emotion, motivation, and the feeling of pleasure.
Ecstasy: Common street name for MDMA.
Hyperthermia: A potentially dangerous rise in body temperature.
MDMA: Common chemical name for 3,4-methlyenedioxymethamphetamine.
Neurotransmitter: A chemical that acts as a messenger to carry signals or information from one nerve cell to another.
Norepinephrine: A neurotransmitter present in regions of the brain that affect heart rate and blood pressure.
Serotonin: A neurotransmitter used in widespread parts of the brain, which is involved in sleep, movement and emotions.

MDMA is in the category of hallucinogenic drugs that is also the same as "Molly" which is a phenethylamine. There are many other "Me Too" ecstasy's that are phenethylamines, ethylamines, and tryptamines with similar effects as MDMA. Because MDMA is an entactogen (Greek and Latin Roots; "produce touch within") it increases the senses causing disinhibition and increased unintentional sexual conduct. It can cause a feeling of visual enhancement to light, dehydration secondary to hyperthermia, seizures secondary to dehydration, muscle spasms, agitation and cardiac arrhythmia's. Some people can have a bad trip based on their state of mind at the time the drug is in the system.

A typical pill of MDMA can contain a number of different "Me too" ecstasy's. The amount of MDMA ranges from approximately 100 to 150 mg per tablet. The claim that a "Molly" is a pure form of MDMA is misleading. Molly tends to be a number of different chemicals all related to MDMA and MDA with the various properties where the MDMA molecule is chemically manipulated. Some may have more hallucinogenic properties and some may be more toxic from the processes of making them. Some will produce "Hangovers" while some may cause the "Blackout" in a user. Despite the "Blackout", the person still appears to be awake, energetic, and cognizant of their environment but they are not.

MDMA affects the brain by increasing the activity of at least three neurotransmitters (the chemical messengers of brain cells): serotonin, dopamine, and norepinephrine. Like other amphetamines, MDMA causes these neurotransmitters to be released from their storage sites in neurons, resulting in increased neurotransmitter activity. Compared to the very potent stimulant, methamphetamine, MDMA causes greater serotonin release while blocking reuptake and somewhat lesser dopamine release. Serotonin is a neurotransmitter that plays an important role in the regulation of mood, sleep, pain, appetite, and other behaviors. The excess release of serotonin by MDMA causes the mood elevating effects experienced by users. However, by releasing

large amounts of serotonin while at the same time blocking the re-uptake of serotonin, MDMA causes the brain to become significantly depleted of this neurotransmitter, contributing to the negative behavioral effects that are experienced for several days to years after taking MDMA.

Numerous studies in animals have demonstrated that MDMA can damage serotonin-containing neurons; some of these studies have shown these effects to be long lasting. This suggests that such damage may occur in humans as well; however, measuring serotonin damage in humans is more difficult. Studies and from my experience interviewing users, have shown that MDMA can cause long-lasting confusion, depression, and selective impairment of working memory and attention processes. Such memory impairments have been associated with a decrease in serotonin. Imaging studies in MDMA use have shown changes in brain activity in regions involved in cognition, emotion, and motor function

MDMA users can experience withdrawal effects such as fatigue, loss of appetite, depressed feelings, and trouble concentrating.

Further effects of MDMA are nausea, chills, sweating, blurred vision, muscle cramps, clinching in the teeth; MDMA also disrupts the body's normal regulation of temperature. This can lead to hyperthermia, which sometimes can be lethal. One tablet that would last up to six hours and in a warm environment could cause pints of fluid loss. These symptoms are particularly dangerous for those with circulatory problems or heart disease.

MDMA is administered by taking a tablet, powder, or capsule of the drug. The taste of the powder can be noxious to some users so they may “Parachute” by placing the powder in a small piece of tissue paper and swallowing the whole thing. The drug is a synthetic psychoactive chemical mix that is similar in effect to a combination methamphetamine and mescaline. It gives users feelings of euphoria, distortions in time, and distortions in perception. These illicit substances are common and popular in nightclub and rave scenes. Sometimes, MDMA is used in collaboration with other drugs like marijuana, methamphetamine, ketamine, cocaine, and Viagra®. This is referred to as a multiple drug experience or sometimes "Flipping".

MDMA can produce a number of long-term effects that are detrimental to the body. These effects are due to depletion of serotonin levels from 50 to 80% of normal. These include:

Confusion, depression, sleep problems, severe anxiety, cravings for the drug, a person may crave the drug after only taking it a few times. Users may show poor performance on cognitive and memory tasks.

Withdrawal symptoms include fatigue, loss of appetite, trouble concentrating, and depression.

Ecstasy can cause euphoria ("High" or "Rolling"), distortions in time, and distortions in perception. Symptoms that may be present and persist long-term which are detrimental psychologically and physically are confusion, depression, sleep disturbances, moderate to severe anxiety. Further, withdrawal from the drug post dose include fatigue, loss of appetite, trouble concentrating and depression.

It is crucial to first understand how easily drugging someone can be accomplished, even when the person thinks they are being careful. Just how easy is it to drug a drink? So you are in a crowded bar, with your drink close at hand (probably turned a bit sideways talking to someone beside or someone standing a little away from the bar). Then someone reaches behind you to grab a napkin or pretzel. With a little eye or nasal spray vial in the palm of his or her hand, he or she can so easily dose your drink. It can happen just that quickly

In the America's Most Wanted episode about DFSA, other than the initial scene setting up the scenario, the female "victims" have no idea what is happening. They were told they were auditioning for a reality show and did not know that the men were actors with hidden cameras, assigned to "dose" their drinks (using just water). Over and over the actors "dosed" drinks and even they were stunned by the ease of it. No one challenged them, neither the targeted "victims" nor others in the unknowing crowd.

The coldness of the drink (an iced drink such as beer versus wine or a shot) may also mask the taste somewhat, and the more alcohol already consumed may dull the taste buds enough not to notice the change. The drug may even be concealed in ice cubes. A victim in one West Coast case observed the suspect make her drink using ice chopped from a large block of ice and noticed a slight "rainbow" effect in the ice but didn't sense danger. This wasn't recognized during the investigation at that time but, looking back, this may indicate the use of the GHB ***analog*** 1,4 butanediol, aka BD or BDO, (chemical cousin with similar properties as GHB and in fact one of the analogs that rapidly converts in the human body to GHB). BD has a more oily texture than GHB or GBL. This may also be important in cases where very little is consumed and yet the victim had an intense reaction. BD may be literally floating on top, thus only a small quantity of the drink may have great impact.

Summary of the Investigation:

Devin Hartman, aka Zach Anderson (Hartman used the alias Zach Anderson with JL) the defendant, meets the victim, JL, on the OK Cupid dating website and converses with her for several weeks. On 6/20/14, they have their first date at Tap Bar where JL voluntarily consumes 5-6 beers over a 4-5 and 1/2 hour period. JL did leave to use the restroom on one occasion while at Tap, leaving your drink unattended. At approximately 8:30pm, on surveillance video, she and

the defendant part ways, and she is seen on video surveillance exiting defendant's SUV walking the wrong way up into the parking deck clearly impaired under the influence. She exhibits a loss of motor coordination when seen on video in elevator three and drive way cameras. Security guard, Sutton, attempts to warn JL of the danger of walking where cars can hit her and she replies, "This if fun!" Sutton at this point, Sutton is concerned based on his observation of her level of impairment that she could get hit by a car crossing the street or be assaulting physically or sexually. Sutton stated that JL was vulnerable, slurring words, stumbling, and was not aware of what's going on. Ms. Gail King, parking security, was also a witness to JL's impairment.

Text messages/phone records indicate that Hartman picks her back up, and then drops her off again approximately an hour later. At this point, she is so impaired that security calls a cab for her to get back to her Brookhaven home.

JL has no recollection of anything that occurred from 8:30pm until 2am, when she suddenly wakes up on her porch. Her underwear, cell phone and keys to her residence are missing . She goes to a local eating establishment and later to a hotel. JL urinated twice prior to going to Grady hospital. She experienced burning dysuria (pain upon urination) She goes to Grady hospital later that day, but beyond the 12 hour window to catch many drugs used in drug facilitated sexual assaults (DFSA). Pertinent findings at the hospital include: she does not have any recollection of the sexual assault, she has vulva tenderness and swelling, she has a labia tear requiring stitches, toxicology is negative and GBI does not find any drugs that they test for including GHB and alcohol in her system. GBI did find acetone in JL's blood. It is important to note that acetone is added to GHB as a method to dry the substance into a powder. Acetone is also present in nail polish removers containing GBL on the Internet.

During her interview at the hospital with Detective Sluss, the victim on recording, experienced protracted emesis (vomiting). Apparently there were pill fragments in bile like fluid which were not tested. JL's current routine medications include spironolactone, venlafaxine, and minocycline. Spironolactone is a potassium sparing diuretic; venlafaxine is an antidepressant also used for generalized anxiety and premenstrual symptoms; minocycline is a tetracycline antibiotic primary used for acne.

Biologic samples were subsequently obtained from Hartman and GBI testing of DNA proved that there was both vaginal and anal intercourse. E-mails to and from JL and Hartman indicate that Hartman denied any sexual contact prior to DNA results saying they just kissed. It appears Hartman now contends the vaginal and anal intercourse between him and JL was consensual.

It also has been made know to me that there are four other victims that he allegedly raped where he used the Zach Anderson alias, and even dated other women using the same alias. One woman he dated for 18 months and it wasn't

until he was arrested that she found out he was living a double life, having a wife and kids at home. The defendant was not forthcoming about his true identity until investigators determined that this real name is Devin Hartman.

Opinion

Based on my training and experience, I know most of the DFSA drugs of choice typically cause some level of amnesia, especially when mixed with alcohol or other drugs. This type of amnesia is known as ***anterograde amnesia.*** This means the loss of memory of events that occur while under the influence of a drug, beginning when the drug takes effect. Thus there is no loss of memory of events prior to the drugging.

A very important point to remember is that while we have well established uses and anticipated symptoms for drugs, not everyone will have the desired or "usual" reactions. GHB, benzodiazepine drugs, sleeping pills and some others may be expected to produce CNS depressant symptoms but some people may experience ***paradoxical stimulation*** instead. MDMA (aka Ecstasy, Molly), for example, is expected to produce happy, touchy-feely, energizing reactions but for some it may be anxiety, nausea and agitation.

JL exhibited the symptoms of classic of GHB intoxication. Symptoms such as sudden onset of witnessed intoxication and memory loss, vomiting, abrupt "awakening" at four to six hours, and no hangover sensation, The blood/urine sample was taken 12 to 16 hours after ingestion of the suspected drink, the negative toxicology report is "consistent" and supportive of GHB involvement, since GHB would be gone from urine in 12 hours, and other drugs would still have been present. In this case only blood samples were taken which gives an even shorter detection time possibility for any drug. Hair samples were also taken, but these were prior to the window necessary for possible positive GHB levels.

Marc LeBeau, Director of the FBI Laboratory made an interesting statement regarding negative toxicologies, "What we see as obstacles (victim's lack of memory, negative toxicology) are in fact elements of the crime" A negative toxicology is entirely consistent with history, i.e., time frame between assault and forensic exam. The predator expects GHB to be gone from blood and from urine in about 6 to 8 hours after ingestion, unless the victim is re-dosed during the incident.

Based on my review of the reports elucidated above, it is my opinion that JL was a victim of a drug facilitated sexual assault. The victim was impaired to the point where consent could not be given or withheld for any type of sexual relations on the part of the defendant. It is also my opinion that the signs and symptoms of GHB or it's precursors exhibited by the victim were consistent with signs and symptoms reported in medical literature and from my experience. The victim's

and witnesses statements of the victim's behavior were consistent with the duration of symptomology the victim was experiencing. It is my opinion that the defendant knew or should of known that JL was not capable of consent to engage in any form of sexual acts.

Dr. Matthew Whitaker, Arizona State University Professor of History, stated, "Warning women about heavy drinking places the burden of not being sexually assaulted squarely on the shoulders of the victims, and when they are raped this twisted dynamic often leads them to blame themselves for their own mauling. This is particularly disturbing as there is no female behavioral pattern that will thwart an assailant who is determined to harm them. The bottom line is that the victims of rape should not be expected to have forestalled their attack, and are never to blame for it, even if they are drunken "hot messes" at the after party."

He continued, "Blaming excessive drinking for sexual assault among women is like blaming someone who left their keys in their car for the theft of their vehicle. Is leaving your keys in the car unwise? Yes. Is it the cause of your car being stolen? No. The person who stole your car is the responsible one. Besides, they do not need your keys to take your car. Sadly, the certainty of punishment for stealing a car is often much greater than the certainty of punishment for raping someone."

This mentality particularly applies in DFSA cases. Someone witnessing someone losing control, passing out, being otherwise incapacitated, etc. should be concerned for their well-being, rather than take advantage of it via theft or assault. In fact, some rapists take great care to give the appearance of being the Good Samaritan to naïve (or tipsy) witnesses and then victimize the impaired once out of sight.

Lastly, when a patient goes to the dentist or doctor for a simple dental or medical procedure, the health care practitioner has the patient sign the consent for the procedure prior to the patient receiving any medication that would impair their ability to form consent. They do not ask the patient to sign a consent after they are medicated.

Conclusion:

JL lacked the ability to consent to any sexual act in the instant case. She was the victim of a drug facilitated sexual assault. The symptoms and negative lab result are consistent with GHB. Positive acetone levels would also be indicative of the use of GHB as this is a drying agent used in the manufacturer of this illicit substance. In addition, nail polish remover containing GBL, which converts to GHB in the body, contains acetone. JL lost approximately 6 hours of her life and was vaginally and anally raped. She had no recollection of the attack. Her level of impairment is inconsistent from ingesting 5-6 beers over five and a half hours, then loosing six hours of her life and memory.

Thank you for allowing me the opportunity to review this case. My opinion is based on my review of documents and interviews to this point. Ti is subject to further revision and addition if additional data is presented at a later time.

Respectfully submitted,

Marc Gonzalez, Pharm.D

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