Lorazepam: A Weapon of Offence

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ABSTRACT

Forensic Section

The use of knock out drugs for perpetuation of crime has significantly increased in recent years. These drug facilitated crimes mainly involve robbery and sexual offences. Most of the drugs employed for these purposes affect the nervous system and bring a state of incapacitation and amnesia. The miscreants exploit these properties of drugs to commit such crimes. The unsuspecting travellers on public transport vehicles and women in disco parties are most vulnerable to such crimes. The unrestricted and unregulated sale of prescription drugs and general ignorance of such incidents is a challenge that needs to be addressed promptly.

CASE REPORT [TABLE/FIG-1]

A dead body of a male was recovered from a canal and was brought to the mortuary for postmortem as an alleged case of drowning. The body was in advanced state of decomposition. On external examination, bloating of facial features was evident from bulging out of eyeballs and protrusion of tongue out of the mouth. The abdomen and external genitalia were also distended. There was washerwomen appearance of skin of hands and feet. The epidermis was peeled off at places. The teeth were loose in sockets. There were antemortem grazed abrasions on the bony prominences and presence of copious and fine froth at mouth and nostrils. The lungs were very voluminous and appeared balloon like. The anterior surface of both the lungs also showed the indentation marks of ribs. Internally, the lumina of trachea, bronchi and bronchioles showed presence of fine froth mixed with sand. The diatom test was conducted on the bone marrow obtained from sternum and it elaborated the similarities in the diatom species and their predominance in same order as in control water samples obtained from the scene of crime. Antemortem drowning was given as the cause of death in this case. In addition, the viscera consisting of parts of liver, spleen and both kidneys were sent for chemical examination at a state level government laboratory for detection of any poison. It reported the presence of lorazepam in all the viscera samples. However, there was no mention of the level of lorazepam in the report.

Afterwards, the police investigated and arrested four persons who were trying to sell the car of the deceased (a professional taxi driver). They revealed that they had hired the vehicle with an intent of robbing it. During the journey, they offered biscuits to the driver of the vehicle that he ate as all other 'passengers' were also eating. After sometime the driver became drowsy and stopped the car and then lost consciousness. They took him out of the car and threw the body in a nearby canal and fled away with the car. They had bought some tablets of lorazepam (2mg each) from a local chemist and powdered them and then made a solution of it by adding water. Some biscuits were soaked in it dried and stacked in a particular order inside a packet. The biscuits were distributed in such a manner that the first four un-soaked biscuits were delivered among the four 'passengers' and the fifth one was given to the driver. The biscuits were distributed twice in the entire process to make driver stuporous.

Keywords: Anaesthetic, Lorazepam, Poison



[Table/Fig-1]: Photograph of the dead body showing external features of decomposition

DISCUSSION

The use of knock out drugs for facilitating crime is fast emerging as a major public health issue that needs to be addressed promptly. As many such incidents do not enter the official statistics, there is a dearth of data on such crimes. Such incidents are commonly reported among travelers while using a public transport means such as trains, buses, taxis etc. Usually, the offender first acquaints himself with an unsuspecting traveler and after familiarizing, offers food or drinks laced with sedatives to the victim. The victim gets sedated, loses consciousness and loses his valuables to the miscreant. In order not to arouse the victim's suspicion, an odourless, colourless, and tasteless substance is used so that it can be added to a drink or eatables without being noticed. The criminals also use such knock out drugs to facilitate sexual assault with the intention of producing sedation, alteration of the victim's behaviour, anterograde amnesia and the creation of a helpless state that the criminal can deliberately exploit. The use of these drugs for sexual exploitation is closely associated with disco and rave parties [1]. However, in such crimes, robbery, ranks well ahead of sex crimes, homicide and other offences. Though initially limited to the developed world,

viz., USA, Europe, Canada and United Kingdom, the problem is now also being observed in the developing world including India as well [1-6]. Some other countries like Bangladesh have also reported similar incidents [7].

With the technological advancements of the past and present century, newer agents have come into market that can not only be used for medicinal purposes but also for the perpetuation of crime. Benzodiazepines, nitrazepam, alcohol, rohypnol etc have the potential of abuse because of their unique effects on the central nervous system, benzodiazepines being involved in a majority of cases [3]. Similar observations were also made by a study conducted in Germany [4]. Most of these agents can be easily mixed with drinks and are capable of producing unconsciousness very quickly. Lorazepam is one such commonly abused drug [7]. Almost all benzodiazepines produce anterograde amnesia in a dose dependent manner. Lorazepam is one of the agents that produce very quick and profound amnesia [7-9]. It also possesses muscle relaxant properties due to which the victim is not in a position to offer any resistance. This drug has little nauseating potential. It is also less irritating as compared to diazepam and some other members of the same class. All these factors might have a bearing on its selection for perpetuating such crimes. The drug is metabolized in the liver and excreted in the urine as glucuronide conjugate. Though this drug is more commonly used via intravenous route, tablet form is also available. The present case is unique in the Indian context where the amnesic properties of the agent were used to put a person to sleep for committing a crime as it represents a newer way of robbery. The typical findings of drowning helped in ruling out poisoning as cause of death in this case. Given the increased incidence of use of biscuits in such crimes, the Central Forensic Science Laboratory has developed a quick and reliable technique to detect such adulteration [10].

CONCLUSION

This case highlights that without routine chemical and toxicological investigations in unclear circumstances of death, or where the cause

of death is apparently certain, the underlying cause may easily be overlooked. The case also stresses upon importance of a detailed and meticulous history in such cases so as to direct investigation in the right direction. This case also raises eyebrows regarding the easy and unrestricted access to pharmaceutical agents where the chemists and druggists make drugs available to the common man without even checking for any relevant prescription. This not only puts the health of general public at risk but also makes it easy for the criminals to commit an offence. Failure to check this medical malpractice should be addressed seriously and at the earliest by the health authorities. The general public should be advised not to consume any eatables provided by strangers.

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