The Use of Alcohol to Facilitate Sexual Assault

REFERENCE: Kerrigan S: The use of alcohol to facilitate sexual assault; Forensic Sci Rev 22:15; 2010.

ABSTRACT: The presence of alcohol (ethanol) is a common toxicological finding in alleged cases of drug-facilitated sexual assault (DFSA). Alcohol was identified as the most frequently encountered drug in DFSAs more than a decade ago, and epidemiological studies to date confirm this initial finding. There is no single substance that is uniquely associated with DFSA. Alcohol has been used by humans for thousands of years and its effect on sexual behavior is well established. Despite the fact that alcohol has been the subject of scientific investigation for several hundred years, DFSA casework involving alcohol remains complex and poses numerous challenges. The prevalence of alcohol in DFSAs is reviewed within the context of toxicological findings and blood alcohol concentration (BAC). Pharmacological aspects are briefly presented, including pharmacokinetics and retrograde extrapolation. The effects of alcohol are discussed within the context of the pharmacodynamics of alcohol and the mechanistic issues associated with alcohol's disruption of memory. The amnesic effects of alcohol are reviewed, with particular focus on the two distinct types of alcohol-induced blackout: fragmentary and en bloc. The prevalence of and the BACs associated with this type of alcohol-mediated memory loss are described. Finally, biological specimens (blood, serum, and urine) are reviewed from a toxicological standpoint, and the associated methodology for quantitative alcohol determination is presented.

KEY WORDS: Alcohol, drug-facilitated sexual assault, ethanol, intoxication.