Alcohol and Non-Rapid Eye Movement Parasomnias: Where Is the Evidence?

John M. Rumbold, M.B.Ch.B.¹; Renata L. Riha, M.D.²; Ian Morrison, Ph.D.^{2,3}

¹Centre for Law, Ethics and Society, Keele University, Staffordshire, UK; ²Department of Sleep Medicine, Royal Infirmary of Edinburgh, Edinburgh, UK; ³Department of Neurology, Ninewells Hospital, Dundee, UK

Although alcohol has been identified as a potential precipitant or “modifier” of non-rapid eye movement (NREM) parasomnias,¹ there is controversy over expert evidence supporting an association in criminal cases of alleged sleepwalking. There are certainly good grounds for skepticism when an individual who is heavily intoxicated claims to have been sleepwalking, but current evidence does not support the preclusion of all alcohol-related sleepwalking in clinical or forensic settings.² Alcohol prior to the sleep period is known to initially have a sedative effect, followed by increased wake after sleep onset and fragmentation of sleep.^{3,4} It may also cause a small but significant increase in SWS.⁵⁻⁷ The importance of these changes seen in the sleep lab is disputed. Some authors consider the evidence too weak for alcohol-triggered sleepwalking to be a tenable defence.⁸

However, a recent case-control study of sleepwalkers identified alcohol as a triggering factor in 12%, additionally finding alcohol to be a precipitant for violent sleep behaviors.⁹ Another case-series found that 14% of SWS parasomnia episodes were triggered by alcohol.¹⁰ Most British sleep experts agree there is a positive association between alcohol and sleepwalking for a minority of patients (Interview study of British sleep physicians by John M. Rumbold – unpublished data). The testimony of a forensic sleep expert on factors that may trigger sleepwalking would satisfy all the *Bonython* criteria¹¹ for admissibility for expert evidence in English common law, if his or her opinions were supported by either the literature or by substantial clinical experience. Therefore it is justified to testify about a positive association between alcohol and sleepwalking.

There are considerable policy issues related to alcohol and crime with implications for the criminal justice system, but it would be inappropriate to exclude evidence about a link between alcohol and sleepwalking simply through a lack of laboratory studies or indeed to dismiss the existing evidence that suggests alcohol is a modifier of SWS.

We argue that the current consensus stating alcohol does not trigger or modify SWS parasomnias is artificial and there is increasing laboratory and clinical evidence to challenge the *status quo*. There is a need

for robust debate about alcohol and sleepwalking in the sleep literature and a very urgent need for well-conducted studies in the area.

CITATION

Rumbold JM; Riha RL; Morrison I. Alcohol and non-rapid eye movement parasomnias: where is the evidence? *J Clin Sleep Med* 2014;10(3):345.

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SUBMISSION & CORRESPONDENCE INFORMATION

Submitted for publication December, 2013

Accepted for publication December, 2013

Address correspondence to: Dr. Ian Morrison, Department of Neurology, Ninewells Hospital, Dundee DD1 9SY, UK; Tel: +44 (0)1382 740034; Fax: +44 (0) 1382 425739; E-mail: ian_m@doctors.org.uk

DISCLOSURE STATEMENT

The authors have indicated no financial conflicts of interest.