



Short slow wave sleep latency in patients with disorders of arousal



Dear Editor,

We read with great interest the review entitled "Disorders of Arousal and timing of the first period of slow wave sleep: Clinical

and forensic implications" by M. R. Pressman [1]. The author found that the mean slow wave sleep latency (SWSL) could be as short as 10.6 min in normal subjects (and even shorter if sleep deprivation and alcohol consumption were combined), in contrast to the

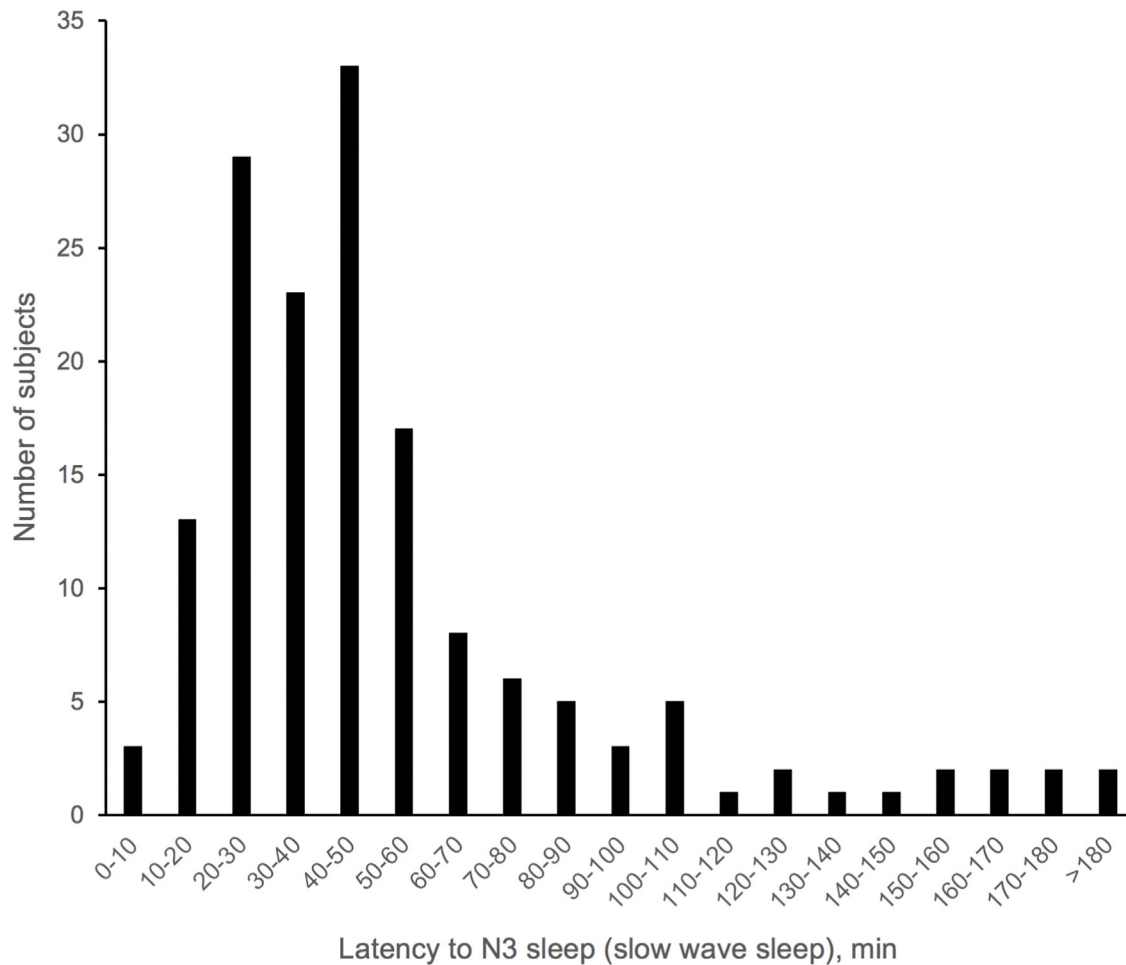


Fig. 1. Histogram of the distribution of the latency to N3 (slow wave sleep, y axis) among 158 adults with disorders of arousal.

Abbreviations: SWSL, slow wave sleep latency; DOA, disorders of arousal; SWS, slow wave sleep.

30–120 min range used by some experts to determine whether a criminal case may be related to a disorder of arousal (DOA). However, evidence for normal SWSL in patients with DOA was limited to two small samples and a series of 50 adult patients with DOA that we had studied [2]. We aim to clarify these approximations (based on the mean minus standard deviation) by producing the exact measurements of SWSL obtained by polysomnography in our other series of 158 adults with DOA [3]. As shown in the histogram (Fig. 1), the minimum SWSL on the first night was 5.5 min and the median was 43 min. On the second night (N = 118 patients), the SWSL was at its shortest 14 min and the median was 45 min. In a similar vein, Lopez et al. reported a minimal SWSL of 6 min (median: 17 min) in a series of 100 patients with DOA [4]. These results are consistent in showing that SWS can be achieved as early as 5–10 min after sleep onset, and that inter-patient variability is high. Ultimately, we believe that the time between sleep onset and the first parasomnia event would be more suitable than SWSL for assessing the temporal possibility that a crime occurred during DOA. Accurate measurements from video-polysomnography on large series of adults with DOA are needed at this stage of the thinking.

Declaration of competing interest

The authors report no relationships that could be construed as a conflict of interest.

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