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Nightmare recurrence in patients with post-traumatic stress disorder is likely a primary feature of central sympathetic nervous activation

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LETTERS TO THE EDITOR

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Response to Sierro C, Leslie W, Putois B. Long-term effects of treatment for chronic nightmares: is imagery rehearsal therapy robust in the COVID-19 pandemic? *J Clin Sleep Med*. 2020;16(11):1993. doi:10.5664/jcsm.8742

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Sierro and colleagues[1] have reported some important findings in 29 of 48 patients with post-traumatic nightmares who underwent a study to assess the long-term effects of imagery rehearsal therapy (IRT) on nightmare frequency (NF), and completed 4-year follow-up questionnaires prior to the 17 March 2020 French coronavirus disease 2019 (COVID-19) lockdown. To estimate IRT robustness, 23 of 29 patients also completed the questionnaires at the end of the lockdown in May 2020. Some of the salient findings from 20 of 23 patients were as follows: pre-IRT the mean (SD) monthly NF was 28.8 (20); post-IRT, 8.9 (8.9); at 4-year follow-up prior to the March lockdown, 6.25 (10.6); with a post-lockdown increase ($P = .003$) in NF to 19.35 (32). Overall, 13 of 20 (65%) reported an increased NF and 7 of 20 (35%) reported no lockdown effect. However, the post-lockdown increase in mean NF was accounted for by only 2 of 20 patients who reported a greater than pre-IRT NF during lockdown; the post-lockdown NF was 9.5 (10) after these 2 patients were excluded.[1] The authors note that, for the treatment responders (n = 18), during lockdown the NF remained 3 times lower than pre-IRT levels.[1] During lockdown, the nightmare content was variable, with only 30% involving the original trauma and 5% COVID-19.[1] The significant reduction in overall post-traumatic stress disorder (PTSD) symptoms during IRT was sustained over 4 years ($P = .008$).[1] The authors comment on the robustness of IRT effects to stress re-exposure and time.[1]

IRT is a nightmare-focused treatment, which uses a cognitive-behavioral model including mastery, where nightmares are treated as learned behaviors that can be controlled by working on them while awake.[2] IRT not only improves nightmares and sleep but also decreases overall PTSD symptoms (intrusion, avoidance, arousal).[2] This was also noted by Sierro and colleagues[1] who observed an essentially 3-fold decrease in the frequency of traumatic nightmares and sustained improvement in global PTSD symptoms 4 years post-IRT, including post-lockdown. The robustness of the beneficial effects of IRT likely represents an overall decrease in the activation of the fear circuitry and improved emotional regulation with targeted treatment of nightmares. Nightmares likely represent a primary feature of sympathetic activation in patients with PTSD, which can be a treatment target for PTSD. This is possibly further supported by the observation that treatment of emergent nonspecific nightmares in patients with PTSD (previously in remission) during the COVID-19 lockdown with the α-adrenergic receptor blocking agent prazosin (which reduces central sympathetic outflow) may have aided in the prevention of a full PTSD relapse.[3]

CITATION

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DISCLOSURE STATEMENT

The author has seen and approved the manuscript. The author reports no conflicts of interest. The author reports the off-label/investigational use of prazosin for the management of nightmares.