Comparing the Effect of Prazosin and Hydroxyzine on Sleep Quality in Patients Suffering from PTSD

Serge Brand\textsuperscript{1,2}, Mohammad Ahmadpanah\textsuperscript{3}, Parasto Sabzeie\textsuperscript{3}, Seyed Mohammad Hosseini\textsuperscript{3}, Saadat Torabian\textsuperscript{4}, Mohammad Haghighi\textsuperscript{1}, Leila Jahangard\textsuperscript{3}, Hafez Bajoghli\textsuperscript{3}, Edith Holsboer-Trachsler\textsuperscript{1}

\textsuperscript{1} Psychiatric Hospital of the University of Basel, Center for Affective, Stress and Sleep Disorders, Basel, Switzerland.
\textsuperscript{2} Department of Sport, Exercise and Health Science, Division of Sport Science, University of Basel, Basel, Switzerland.
\textsuperscript{3} Research center for Behavioral Disorders and Substances Abuse, Hamadan University of Medical Sciences, Hamadan, Iran.
\textsuperscript{4} Department of Community Medicine, Hamadan University of Medical Sciences, Hamadan Iran.
\textsuperscript{5} Psychiatry & Psychology Research Center (PPRC), Roozbeh Hospital, Tehran University of Medical Sciences, Tehran, Iran.

Abstract

In light of the high prevalence of sleep disorders in patients suffering from post-traumatic stress disorders (PTSD), this study sought to comparing the effect of prazosin and hydroxyzine on sleep quality in this patient group. A total 100 patients suffering from PTSD were assessed (mean age: M= 35.51, SD= 6.41; 28\% females). Next, they were randomly assigned to one of three treatment groups: prazosin (33 patients), hydroxyzine (34 patients), or placebo (33 patients). The trial lasted for 8 weeks. Patients’ sleep quality was assessed using the Pittsburgh Sleep Quality Index (PSQI). Items taken from the Mini International Neuropsychiatric Interview (M.I.N.I.) were used to operationalize PTSD. Compared to controls, patients treated with prazosin and hydroxyzine reported improved sleep and less nightmares. Improvement was greatest in patients treated with prazosin, as compared to hydroxyzine and placebo. Improvement in sleep was associated with amelioration of PTSD symptoms. Both prazosin and hydroxyzine can be used to treat psychopharmacologically sleep disorders and nightmares in patients suffering from PTSD, leading also to reductions in PTSD symptoms.

Keywords: Prazosin, Hydroxyzine, PTSD, Sleep Disorders.

*Corresponding Author: Serge Brand
Email: Serge.Brand@upkbs.ch