Effects of Quranic and broadband therapy among tinnitus on N100 and p300 evoked residual potential tests: A preliminary study

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Tinnitus is known to unfavorably affect patients’ quality of life. Cognitive impairments such as inadequate concentration and attention have been reported in some tinnitus patients. This preliminary study was performed to determine the memory abilities of tinnitus patients using the N100 and p300 evoked residual potential tests. We recruited seven patients with tinnitus who underwent 6 months treatment with Quranic rhythm (group-1) and Broadband noise (BBN) (group-2). All subjects completed the tasks successfully. Statistical analysis showed no significant difference in 4 groups (preBBN, post BBN, pre Quranic and post Quranic) for both tests (p>0.05). The amplitude of N100 wave targeted stimuli in group-1 showed mild cognitive improvement (8 out of 19 channels improvement) compared to group-2 where there was 7 out of 19 channels. The latency of N100 wave target group-2 showed better improvement than group-1. The amplitude of P300 wave targeted stimuli in group-2 patients with mild cognitive improvement compared to group-1. The latency of p300 wave targeted stimuli in group-2 patients with mild cognitive improvement after intervention. Our findings suggest that Quranic rhythm is one of the alternatives and a potentially new treatment option for tinnitus patients in addition to the use of Broadband noise.

Biography
Zuraida Z is a Senior Medical Lecturer in the Audiology program, School of Health Sciences, Universiti Sains Malaysia (USM). She has received her Medical degree (MD) from USM in 2002 and Master of Science (Medical Audiology) in 2010 from the same university. She has also been an active Researcher in the field balance and vestibular and has published more than 60 papers including journal, oral, books and proceedings. She is currently developing a virtual vestibular rehabilitation procedure for balance disordered patients.

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