

TINNITUS SUPPRESSIVE EFFECT AND STIMULUS PREFERENCE FOR THERAPY: PRELIMINARY FINDINGS AMONG PATIENTS WITH TINNITUS AT HOSPITAL UNIVERSITI SAINS MALAYSIA

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ABSTRACT

Introduction: The present study aimed to compare the tinnitus suppressive effect between three different stimuli: white noise (WN), ocean wave (OW) and amplitude modulated (AM) tone stimuli, as well as to determine the most preferred stimulus for tinnitus management among the aforementioned stimuli.

Methods: In this preliminary study that employed a repeated measures design, 10 eligible adult patients with tinnitus (recruited from Tinnitus Clinic, Hospital Universiti Sains Malaysia) were enrolled. To determine the suppressive effect, they were required to listen to the three different stimuli randomly (for 3-minute duration for each stimulus). Visual analogue scale (VAS) was used to rate the tinnitus loudness before and after the presentation of stimuli. They were also asked to rank which stimulus they preferred to manage their tinnitus.

Results: Among the stimuli tested, WN produced the most optimal outcome in which suppressive effects were found in all participants. Nevertheless, no significant difference in the amount of suppressive effect was found between the three stimuli ($p > 0.05$). The OW was the stimulus of choice for sound therapy among the majority of the participants followed by WN and AM tone.

Conclusion: WN can be considered as the dominant stimulus for tinnitus suppression. However, OW was the most preferred stimulus for sound therapy. Further large scale studies in this aspect of tinnitus are encouraged to support the findings from the present study.

Keywords: Tinnitus, suppression, sound therapy, white noise, amplitude modulated tone

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