

EFFECTS OF RECEPTIVE MUSIC THERAPY IN ADDITION TO ONABOTULINUMTOXINA TREATMENT FOR CHRONIC MIGRAINE: A PILOT STUDY

L. La Rocca[1], N. Rini[2], M. Rizzo[3], E. Scarlata[1], F. Brighina[2]

[1]M.A. in Music Therapy - Conservatorio "A.Scarlatti", Palermo, Italy; [2]Dept of Biomedicine, Neuroscience and advanced Diagnostic (BIND) - University of Palermo, Italy; [3]Research Office - IRCCS ISMETT Mediterranean Institute for Transplantation and Advanced Specialized Therapies - Palermo, Italy

Background. Chronic migraine is a disabling condition with a significant impact on quality of life. OnabotulinumtoxinA is a recognized pharmacological treatment, consisting of injections in 31-39 sites over the scalp, neck and shoulders for a total dose of 155-195 UI, according to the standardized PREEMPT paradigm, repeated every 12 weeks. Treatment is generally effective and well tolerated, but pain related to the injection procedure is a frequent adverse event and may limit treatment tolerability in some patients. Integrative strategies such as music therapy may reduce pain, thereby improving treatment tolerability and effectiveness. This study evaluates the effect of receptive music therapy as an adjunct to onabotulinumtoxinA treatment for chronic migraine, both during treatment sessions and between sessions through remote delivery.

Methods. 54 patients with chronic migraine were involved in a randomized controlled trial. The experimental group received onabotulinumtoxinA treatment in addition to receptive music therapy before, during and after each injection sessions, whereas the control group received pharmacological treatment alone. Between sessions the intervention continued remotely through personalized relaxing playlists delivered to participants' mobile devices by a qualified music therapist. Control participants instead received emotionally neutral podcasts covering general-interest topics. Compliance with the remote listening protocol and participants' perceived benefit were assessed using a Google Forms questionnaire completed before and after each listening session. Categorical variables were analyzed using the Chi-square test or Fisher's exact test, whereas continuous variables were examined with parametric or non-parametric tests as appropriate. A two-sided p value < 0.05 was considered statistically significant.

Results. Receptive music therapy was associated with significant reductions in pain intensity (VAS) and anxiety (STAI-S8). Pain intensity (VAS) significantly decreased in the experimental group after both treatment sessions ($p=0.01$ and $p=0.003$), whereas no significant changes were found in the control group. Likewise, anxiety levels (STAI-S8) were significantly reduced only among participants receiving receptive music therapy ($p=0.006$). Preliminary findings also suggest that the remote listening program may provide additional emotional support and contribute to chronic migraine pain management.

Conclusions. The integration of receptive music into the PREEMPT protocol appears to improve pain perception, emotional well-being and the overall treatment experience in patients with chronic migraine.