

Control of persistent auditory hallucinations through Audiotape therapy (three case reports)

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Abstract. – Auditory hallucinations are found in patients with schizophrenia. For some patients with persistent psychotic symptoms, hallucinations are unresponsive to medications.

We report three cases with schizophrenia and persistent auditory hallucinations. In this study three types of tapes were used: pure music, music and speech, blank tapes. The patients were asked to record the duration and severity of their auditory hallucinations when they were listening to tapes. Audiotape therapy led to a significant decrease in the duration and severity of the hallucinations ($p < 0.05$).

This study supports treating persistent auditory hallucination by altering external stimulation. Therefore, audiotape therapy could be helpful.

Key Words:

Auditory hallucinations, Audiotape therapy, Schizophrenia.

Introduction

Schizophrenia is a complex phenomenon with different symptoms and functional deficits. Hence, it is often difficult to determine the effectiveness of any intervention strategy by focusing on a specific type of symptom such as auditory hallucinations. The therapist may better determine the type of intervention required when the hallucinations are problematic. The clinician may introduce specific tasks for the purpose of minimizing the influence of the hallucinations¹. The persistent hallucinations affect a person's ability to engage in work, leisure and self care task but the effects are highly variable and individualistic².

For some patients with persistent psychotic symptoms, hallucinations are directly responsible for profound dysfunction in all aspects of daily life. The traditional medical approach for controlling hallucinations is the administration of antipsychotic drugs but some patients continue to experience persistent hallucinations in spite of treatment with psychotropic medication³. There are several methods that have been evaluated for controlling hallucinations. Attempted techniques have included increasing audito-

ry input and aversion therapy and use of earplugs⁵. All these techniques have met with some success but results have not been consistently replicated. This article presents preliminary findings from three participants to evaluating the efficacy of the audiotape therapy in treating auditory hallucination.

Cases Presentation and Treatment

In this study, we assessed three people with diagnosis of schizophrenia according to DSM-IV-TR. These patients include a 32 year old woman with three near fatal suicidal attempts (case 1) and 38 year old man (case 2) and a 20 year old man (case 3). All of them were suffering from hearing voices discussed them in third person and made critical comment about them. Treatment with typical and atypical anti psychotics (including clozapine), augmentation with lithium and anti convulsants failed to suppress voices. All of them had normal hearing.

The patients were asked to record the duration and severity of their auditory hallucinations over a baseline period of a week. Three experimental conditions were assessed in random order on alternate weeks, each condition was applied for two hours between 10 am and 2 pm for a week.

Ratings were made during the intervention too. Intervention conditions were audiotapes of pure music (classical), speech and music (Payam Radio, Iran) and a blank tape (control). The portable audiotape cassette players with intra-aural headphones were also used. When these conditions were investigated no other changes were made to their previous treatment.

Statistical Analysis

Data were analyzed using *t* test in SPSS software (version 16) (SPSS Inc., Chicago, IL, USA).

Outcome

Figure 1 shows tapes of pure music and music and speech reduced the severity of hallucinations whereas the blank tape had little effect.

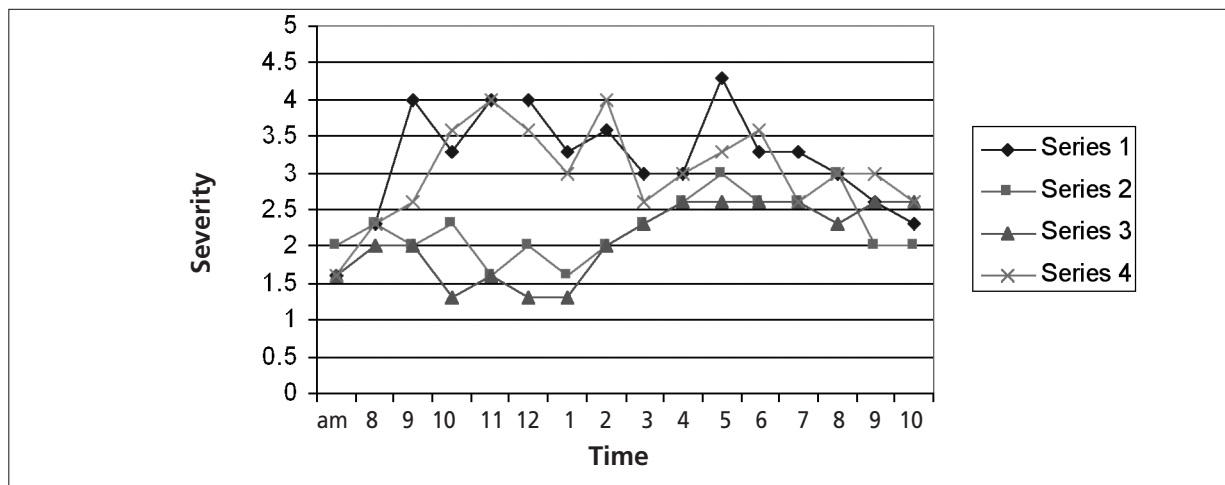


Figure 1. Rating of hallucinations (0 = none, 5 = continuous) during and after of four conditions applied between 10 am and 2 pm. Series 1: Baseline; Series 2: music tape; Series 3: music and speech tape; Series 4: blanktape.

The hallucinatory episodes lasted for an average of 13.5 min while listening to the pure music and 10.1 min for music and speech tape and 16.1 min for listening to blank tape and 17.9 min when not listening to audiotape (baseline). Duration of hallucination significantly reduced when patients listening to the pure music, music and speech ($p < 0.05$), but it's not significantly reduced with blank tape (control).

Discussion

This article presents preliminary findings about efficacy of the audiotape therapy in treating persistent auditory hallucinations. Previous studies indicated the effectiveness of counter stimulation treatments for auditory hallucinations^{5,6} which is in line of our study. McInnis and Marks⁷ reported a patient with psychotic depression who used audiotape therapy. They referred duration of hallucination was reduced but they had not measured severity of hallucination. They used the tape that the voice of patient was recorded on and it was about pleasant memories. Collins et al⁸ compared the efficacy of music tape, music and speech tape, boring tape, and blank tape in treating persistent auditory hallucination in a patient with schizophrenia. They found that both music tape and speech and music tape can reduce severity of hallucinations but they didn't evaluate effect of auditory input on duration of auditory hallucination. Our study is the first study that evaluates the effect of audiotape therapy with different tapes on duration and severity of hallucinations in three cases simultaneously.

Previous studies and the present one underline the possibilities of treating persistent auditory hallucination by altering external stimulation. Audiotape therapy may be helpful. Using a portable cassette player has the advantages of being simple, safe and socially acceptable and the patients are given a degree of personal control over symptoms.

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