

[2]Invited Speakers

[2-02]Invited Speaker

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Music in Medical Settings:
Applications for Dementia and Aphasia

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Recently, the cognitive processing of music has been elucidated, and, based on these findings, music is going to be used for the rehabilitation and treatment of diseases. In neurology, the effectiveness of music therapy has been reported in following diseases/symptoms: dementia, aphasia, paresis and psychological symptoms due to stroke, gait disturbance of Parkinson's disease, and unilateral spatial neglect. In this lecture, I explain the present evidences of the former two symptoms, and introduce our studies about physical exercise with music to cognitively normal elderly people or patients with mild to moderate dementia, and the melodic intonation therapy (MIT) to patients with motor aphasia.

The symptoms of dementia are divided into two factors: the central symptoms which mean cognitive impairment, and behavioral and psychological symptoms of dementia (BPSD) such as delirium, wandering, hallucination, and so on. The evidence of the effectiveness of music therapy to the BPSD has been established. As for the non-pharmacological interventions to central symptoms, only the physical exercise reveals the significant effectiveness. Our team clarified that the physical exercise with music accompaniment is more effective than physical exercise alone (The Mihama-Kiho project).

It is well known that the patient with global aphasia often be able to utter lyrics when he/she sings familiar songs. The melodic intonation therapy (MIT) utilizes the musical factors to improve speaking of aphasic patients. We applied the Japanese version of MIT (MIT-J) to stroke patients with chronic aphasia, and performed functional MRI while naming before and after the intensive training of MIT-J for serial 9 days.