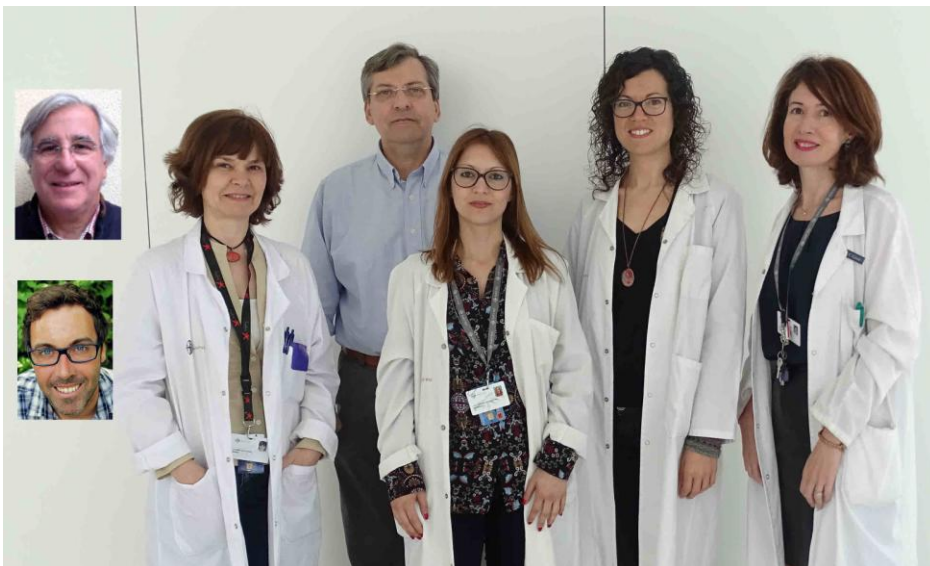




EARLY IMPLEMENTATION OF MUSIC THERAPY IN REHABILITATION OF APHASIC PATIENTS AFTER ACUTE ADQUIRED BRAIN INJURY / EFECTIVITY OF MUSIC THERAPY IN THE REHABILITATION OF ACUTE APHASIC PATIENTS

Carmen García Sánchez

Fundació Institut de Recerca Hospital de la Santa Creu i Sant Pau



1. Project summary

Aphasia is a language disorder secondary to a brain injury that can affect language production, verbal understanding and/or cause other manifestations of language such as repetition or denomination. Therefore, aphasia is primarily a communication disorder.

There are approximately between 30,000 - 45,000 new cases of aphasia every year, and its main cause is stroke. Despite the great impact this disorder has for the patient and their family on a personal, family and work level, it does not have a medical-pharmacological treatment and there is little research on new speech treatments.

In the 1970s, as a result of the observation that some aphasic patients who could not communicate with language were able to sing, a language rehabilitation method called Melodic Intonation Technique (MIT) was developed.

In our project, we wanted to study whether the cognitive-behavioral performance of application of MIT to a group of patients with non-fluent aphasia, was superior to the performance obtained by applying traditional speech therapy (REGIA) and/or a group receiving combination treatment (half the time following a traditional speech treatment and the other half following a MIT program). Eighty-two patients with non-fluent aphasia were randomly assigned to one of three treatments studied. All three groups received the same number of hours of treatment and with the same frequency (30 hours in 10 consecutive days).

To determine the effectiveness of each of the treatments, we explored patients at three different times (baseline, pretreatment and treatment) with a wide battery of neuropsychological tests that assessed not only linguistic functions but also visuospatial functions, and behavioral aspects by functional questionnaires, scales of quality of life, mood and apathy.

The results obtained were treated with related databases and analyzed using SPSS-21 statistical program.

2. Results

The results obtained up to the present, some of which have been presented at various scientific meetings and conferences, are:

1. Intensive Melodic Intonation Therapy is able to significantly improve the degree of the severity of aphasia, everyday communicative activity and psychosocial behavior.
2. The speech rehabilitation treatment and MIT improve the severity of language and communication deficits in chronic post-stroke aphasia. No significant differences were found between the two treatments.
3. The MIT rehabilitation treatment is effective not only in patients with non-fluent aphasia but it can also be administered in groups.
4. Applying MIT to non-fluent aphasic patients with stroke in the left hemisphere significantly improves the overall severity of aphasia without worsening or improving performance in visuospatial-visuoconstructive functions (dependent on the right hemisphere).

3. Relevance and possible implications of the final results

The main implications of the study are:

1. To demonstrate the effectiveness of music therapy, specifically the MIT as a treatment for aphasia. Many patients have benefited from a new, attractive and playful rehabilitation treatment facilitating language recovery.
2. Recognition of music therapy. The figure of the music therapist is a figure that is greatly appreciated beyond our own field, and has become regarded as a health profession in some countries. Our country does not recognize music therapists as health professionals and we believe that this project has shown the benefits that can be exercised in health rehabilitation.

3. Creating a choir of aphasic patients. The creation of the first choir of aphasic patients in Spain has been a milestone reached thanks to this project. We know that from this initiative at least another chorus of aphasic patients (in Olot) has been created.

Singing in a chorus has proven to be a highly appreciated beneficial rehabilitation and playful activity in aphasic patients. Seeing how language fluency improved when music is incorporated encouraged patients to continue fighting to reduce their deficits.

4. Social awareness through media of aphasia as a frequent and devastating disorder.

4. Literature generated

Eficacia de la musicoterapia en pacientes con afasia. Resultados preliminares. Sociedad Española de Neurología. Barcelona. Noviembre 2013.

Beyond language: melodic intonation therapy improves communication, behaviour and quality of life in subacute and early chronic post-stroke aphasia. Preliminary study. International Neuropsychological Society. Jerusalem. July 2014

Efficacy of the Spanish version of the constraint-induced aphasia therapy in post-stroke aphasia. Preliminary study. International Neuropsychological Society. Jerusalem. July 2014.

Eficacia de la rehabilitación grupal intensiva de la eficacia (REGIA) en afasias post-ictus agudos y crónicos en lenguaje, comunicación, conducta y calidad de vida. Sociedad Española de Neurología. Valencia. November 2014.

La Regia-plus mejora la producción oral en la afasia transcortical motora adquirida infantil. Sociedad Española de Neurología. Valencia. November 2014.

La musicoterapia mejora la gravedad de la afasia sin interferir en las funciones cognitivas dependientes del hemisferio derecho. Sociedad Española de Neurología. Valencia. November 2014.

Eficacia de la rehabilitación grupal intensiva de la afasia (REGIA) y terapia de entonación melódica (TEM) en pacientes con afasia post-ictus. Sociedad Española de Neurología. Valencia. November 2015

Intensive melodic intonation in group therapy of chronic aphasic patients: Improves quality and frequency communication. International Neuropsychological Society. London. July 2016.