Abstract

The proposed work stems from positive tests obtained in the past using hypnosis enhanced by multimedia technology as a learning support for people with cognitive disabilities. The present study intends to test the effectiveness of this technique in patients underlying rehabilitation after cerebral ischemic stroke. Reference is made in this case to the recent discoveries about the function of mirror neurons, whose activation may promote the brain activity necessary for rehabilitation by means of neural circuits usually not used. For this purpose a software has been developed that provides for two phases: in the first phase the hypnotic induction is realized through the use of colors, music and the voice of the therapist. In the second phase, once induced hypnosis, a series of movements prepared by a physiotherapist of the rehabilitation is displayed on the screen, and the patient is asked to repeat them. Simultaneously, the software also displays images that reproduce movements of the limbs during pleasant and positive aspects of life, in which the subject can identify. The experiment was conducted at the Hospital of Cream on patients with cerebral ischemic stroke of any etiology (cardioembolic thrombotic, lacunar stroke,), divided into two groups: the first is subjected to traditional rehabilitation, the second was atreated also with multimedia hypnosis.
By means of statistical evaluation we have verified that patients undergoing rehabilitation with hypnosis have a significant clinical improvement compared to the control group.

References


Index Terms

Computer Science   Multimedia
Keywords

Hypnosis  Multimedia  Mirror Neurons  Neuromotor Rehabilitation