Biofeedback treatment in sport rehabilitation

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Biofeedback has been used for more than 50 years in rehabilitation to facilitate normal movement patterns after injury, which use biomechanical measurements of different systems of human body which are involved in sport performance like neuromuscular system, respiratory system and cardiovascular system, etc. If anyone wants to improve their sport ability, they have to integrate their mind and body work together, and in this area neurofeedback (EEG biofeedback) with different kinds like physiological or rehab biofeedback have an approved benefit. Today, any Olympic team must have biofeedback training as a legal appliance to enhance their peak performance. With this method they can manage stress, control heart rate or breathing in a better way, improve reaction time, balance, muscle strengthening and injury healing faster than before. Several small controlled studies have shown that EEG biofeedback improves memory and cognitive function among people with brain injuries, for TBI, this therapy is rated between possibly and probably efficacious (levels 2 to 3 on a scale of 1-5 with 5 being the best). Neurofeedback help people to progress brain function and control in body function. When athletes participate in any activity they have to maintain physical strength, speed, endurance and best mood. On the other hand sport injuries recovery time and to rejoin the team is very important. Rehabilitation is an important part of treatment. New technologies in this can be helpful for better outcomes. Besides attention, concentration is also an important part of sport psychology. Several small controlled and moderately large clinical studies show that neurofeedback (brainwave biofeedback) significantly helps people with attention problem. This therapy is rated as efficacious (level 4 on a scale of 1-5 with 5 being the best). In conclusion, now-a-days we cannot ignore biofeedback treatment in sport rehabilitation. This is a simple, fast response, easy to use, side effect free, motivational and joyful treatment approach.

Biography

Mahindokht Rouhikia has completed her Master’s degree in Mental Health from University of Rehabilitation & Social Welfare, Iran. She is a member of AOTA (American Occupational Therapy Association), AAPB (Association of Applied Psychophysiology & Biofeedback) and AACPDM (American Academy of Cerebral Palsy and Developmental Medicine). For more than 10 years, she worked in Dubai as a Neurotherapist-OT, currently she is working as an Occupational Therapist. In addition, she used QEEG-Based assessment, neurofeedback and biofeedback treatment on variety of patients, which benefited richly in majority of cases.

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