



CONSTRAINT INDUCED MOVEMENT THERAPY (CIMT)

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Constraint Induced Movement Therapy (CIMT) is a treatment technique that helps to improve the motor ability of the affected arm or leg by restraining the unaffected side. The therapy makes complete use of the affected side so that the patient has to rely much lesser on the unaffected side. This use of the affected limb is known as shaping. CIMT is known to stimulate the brain and promote neuroplasticity. Neuroplasticity is the ability of the central nervous system to reorganize itself, remodel the brain structure and make adaptive changes. The brain gets more stimulated through repetitive and consistent activities. Therefore, the more one practices to use the affected limb, the better the brain gets at interpreting demand for a specific type of function. By regular practice of constraint-induced movement therapy, patients gradually develop strength, speed and more natural movement in their affected side. It is usually carried out in patients suffering from neurological disorders like Stroke, Hemi paresis type of Cerebral Palsy, Traumatic Brain Injury, Spinal cord injury and Multiple sclerosis. The effect of CIMT is recognized by cortical reorganization, synaptic strength, redundancy learned and dendrite branching. Many different types of restrains used for the unaffected limb are sling, plaster cast, triangular bandage and splint. CIMT usually works on the models of modified and unmodified types. The modified type consisting of using his/her affected extremity for a maximum amount of time. Whereas in unmodified type activities like toileting, hygiene and bathing only can be carried out by the affected limb by constraining or reducing the use of the unaffected extremity for few weeks. The requirements for inducing CIMT are based on the spasticity scale, the Modified Ashworth scale. Various types of exercises can be used to induce Constraint Induced Movement Therapy in patients like, different types of limb exercises and different type of limb stretches.

References:

1. Constraint Induced Movement Therapy - Wikipedia.
2. Constraint Induced Movement Therapy and its exercises - Flint Rehab.

