



Title: Advances in clinical treatment of Neurorestoratology

Author / Authors: Hongyun Huang

Beijing Hongtianji Neuroscience Academy, Beijing/China

Abstract

Making patients to have more neurological function recovery is very important through neurorestorative therapies. This lecture introduces recent advances in clinical treatment of Neurorestoratology with support of more evidence-based medicine, which include cell therapy, neurostimulation/ neuromodulation, brain-computer interface (BCI), neurorestorative pharmaceuticals, neurorestorative operation and more others. Those advances had benefited patients with neurological deficits; for example, cell therapy was first proved safety and effect by a multicenter randomized, double-blind, placebo-controlled clinical trial; a patient with complete chronic spinal cord injury recovered both motor function and touch sensation with a BCI and restored ability to detect objects by touch and several sensorimotor functions; patients after transhumeral amputation experienced increased sensory acuity and had improved effectiveness in work and other activities of daily life using a prosthesis; a patient with amyotrophic lateral sclerosis used a steady-state visual evoked potential (SSVEP)-based BCI to achieve accurate and speedy computer input and more others. The advances in clinical treatment will benefit more patients in future.