CHARACTERIZATION AND RESCUE OF NEURONAL DYSFUNCTION

April 25th - 26th, 2023

Session 4  Neurorehabilitation and rescue of nervous system dysfunction

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Neuroplasticity and the Unforgiving Brain: A Clinical Neuropsychological Perspective

Partial recovery of higher integrative brain functions is frequently observed after focal and diffuse injuries to the brain. Complete recovery is seldom, if ever, seen. Neuroplasticity is a well-documented phenomenon when broadly defined, but its clinical implications are often not adequately discussed. In this presentation, a few historical and contemporary observations regarding neuroplasticity will be reviewed. An overview will also be provided of selected studies, which document the importance of speed of new learning and the speed and accuracy of simple finger tapping as reliable markers of recovery and, conversely, deterioration of higher integrative brain functions. These measures are useful in patient care and have potential research value.