Psychology – parietal lobe flashcard

Parietal Lobe The Parietal Lobe is one of the four lobes that acts as the control center of the brain, and is located in the back of the head directly under the skull bone. Since the parietal lobe handles functions of focus, cognition, and perception, a person’s spatial perception or sense of touch, and visual perception or differentiation (identification) of size, shapes and colors will be challenged. . Damage to the Parietal Lobe impair the processing of visual images and other sensory input.

Impact of damage or injury would impair cognition where a person’s “ ability to multi-task is reduced or eliminated, as mathematical ability and recognition of the difference between right and left. ” (Newsome Law Firm, 2010) Once a brain is damaged or injury occurs, there is no cure. Therefore, the goal of treatment and rehabilitation focus on assisting a patient to strengthen the skills he or she continues to possess, “ while helping to find compensatory strategies for adaptation of those lacking. (Newsome Law Firm, 2010) Strengthening existing skills, is the first step toward advancing a person’s technique to adopt new methods of reasoning, planning, and decision-making. Patient assessment and diagnosis include the use of computed tomography (CT Scans), magnetic resonance imaging (MRI), x-rays, and other specialized tests. A patient’s treatment team of specialists will often include a psychiatrist skilled in neurology and orthopedics, neuropsychologist who will test aspects of competence, speech consultant to help with expression comprehension and communication and finally a social worker who acts as a liaison.

Treatment for injury or damage to the parietal lobe is “ driven by several considerations: alleviation of specific syndromes/symptoms (such as

depression or apathy), the underlying neuropathology (nature of the injury), improving cognition, and potential effects on recovery. ” (UIC, 2009) Neuropharmacology is an evolving area that is complicated but shows promise for improving outcome and quality of life for those suffering from brain damage or injury. Treatment is pharmacologic in nature and effective in the treatment of neurobehavioral problems resulting from parietal lobe damage.

Physicians prefer to choose medications that cover more than one area. Medications may treat brain chemicals, target symptoms such as chronic pain, seizures, insomnia fatigue, depression or any condition that could worsen mental status or possibly interfere with recovery. There is critical need for additional research in this area as there is no clear guideline for how to manage the deficits caused by Parietal Lobe damage. Damage to the brain structure “ The way in which TBI affects the brain, which is referred to as the neuropathology of TBI, may be especially pertinent to the risk for neurobehavioral problems. (UIC, 2009) The processing of the temporal dimension is in review for current and future research, focus on event order and high-level motion is in question. Discriminating the order, determining the identity, and interpreting spatiotemporal information of visual events are an area for future research. According to an article in Trends in Cognitive Sciences, “ Evidence from patients who have lesions to the parietal lobes and transcranial magnetic stimulation studies in normal subjects suggest that the right inferior parietal lobe underlies this analysis of event timing.

Judgment of temporal order, simultaneity and high-level motion are all compromised following right parietal lesions and degraded after transcranial

magnetic stimulation over the right parietal but not elsewhere. ” (Battelli, Pascual-Leone, & Cavanagh, 2007) Behavioral strategies are an essential component in the care management of these patients. “ Cognitive rehabilitation is a promising and expanding area, that may either by itself or in conjunction with medication result in improved outcomes and function. ” (UIC, 2009) Medication alone is rarely adequate.