

SOCIAL COGNITION AND THE FRONTAL LOBES: AMAZING WHAT PATIENTS CAN TEACH YOU IF YOU JUST LISTEN, OBSERVE, THINK AND MEASURE

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Following the theme of “Back to the Future”, this presentation is a personal history of how studying patients – without the benefit of fMRI – provided landmarks on a journey in understanding personality changes, social behaviour, and levels of self- and other-awareness. Early lessons were learned from research and observation in patients who had undergone frontal lobotomies 25 years earlier. Discovery of a patient with an “atypical” psychiatric disorder labelled the Capgras Syndrome led to the hypothesis of a neurological base for this disorder. Continued re-view emphasized the multi-determinant nature of social behaviour, and led to the evolution of a hierarchical model of awareness. The second phase of research also was focused in patients on the assumption that lesion research is foundational for determining the necessary relations between brain and behaviour. This phase can be characterized by two goals: refinement of the processes underlying social cognition; relating these processes more directly to distinct brain regions. This research was conducted in patients with focal frontal lesions, and in general can be seen as based on the early studies: reaction to humorous stimuli and social situations; theory of mind; and the understanding of risk-taking and impulsivity. The learning objectives of this session are: 1) to identify several determinants underlying the expression of social behaviour, based on refinement of operational definitions of behavior; 2) to cite anatomic structures involved in different processes related to social cognition, and their interactions; and 3) to describe a hierarchical model of awareness, and the relationship of the model to different expressions of disturbed awareness, as well as to psychiatric disorders.