Despite all the precautions needed regarding the interpretation of our results, some specificities are emphasized: behavioral, using a hierarchical letter paradigm. Subjects, relied on a two-level approach, anatomical (MRI-DTI) and this research, a case-study with a group of 6 matched control patients for left targets, these components were not generated by the presentation of a right visual or auditory target with a left distractor in patients. Discussion N2 and N270 might be elicited by the detection of two incongruent response plans by the prefrontal cortex. Their suppression for left targets in patients supports the hypothesis that the right IPL might be a crucial site for automatic activation of competing motor plans generated by cross-modal conflicting stimuli. In patients, the behavioral facilitation for right visual targets only may be due to additional effect of visual dominance over audition in spatial tasks.

Keywords Crossmodal conflict; Inferior parietal lobule; Spatial neglect

Disclosure of interest The authors have not supplied their declaration of conflict of interest.

http://dx.doi.org/10.1016/j.rehab.2015.07.076

CO54-006-e Global/local integration and corpus callosum: Anatomical and behavioural study of Allgrove syndrome (triple-A syndrome)

S. Nash a,*, G. Rode (Prof) b, A. Charnallet b
a Hôpital Henry-Gabrielle, Hospices Civils de Lyon, Saint-Genis-Laval, France
b CMRR et Neuropsychologie, Pôle de psychiatrie et neurologie, CHU de Grenoble
*Corresponding author.
E-mail address: stuart.nash@chu Lyon.fr (S. Nash)

Visuospatial perception is a complex ability, with various aspects. We are continuously integrating different informations, like when our brain processes visual information from left and right hemispheres, in order to form a single and unitary image. The processing of visuospatial information, and more specifically its global/local aspect, has led to many studies, indicating the active involvement of the corpus callosum.

Objective To study the influence of an alteration of the corpus callosum on the integration of local/information.

Methods C.M. presents an Allgrove syndrome [1], likely a pathology of white matter fibres. This patient, with a singular neuropsychological profile, is partially impaired in global and local information integration and shows a corpus callosum alteration. This research, a case-study with a group of 6 matched control subjects, relied on a two-level approach, anatomical (MRI-DTI) and behavioural, using a hierarchical letter paradigm [2].

Results Despite all the precautions needed regarding the interpretation of our results, some specificities are emphasized: at an anatomical level, we note, for C.M., a microscopic alteration of her corpus callosum; the results from our behavioural protocol show, for C.M., a higher precedence effect, a greater sensibility to interference and a facilitation effect more important.

Discussion These different results, never reported before in this pathology, indicates, for C.M., an impairment in global/local integration associated with a corpus callosum alteration. This alteration, probably part of a more global degenerative process linked to her pathology, shows the relevance of an extended neurophysiological assessment coupled to a DTI study, in order to better understand impairments generally appearing in neuropsychological rehabilitation.

Keywords Visuospatial processing; Global/local integration; Corpus callosum; Allgrove syndrome; Diffusion tensor imaging (DTI)

Disclosure of interest The authors have not supplied their declaration of conflict of interest.

References

http://dx.doi.org/10.1016/j.rehab.2015.07.077

Posters

P009-e Physical attractiveness elicits more stable interpersonal coordination

Z. Zhao a,*, R. Salesse (Dr) a, M. Guégoun n a, R. Schmidt (Prof) b, L. Marin (Dr) b, B. Bardy (Prof) b
a MZH laboratory Euromov, University of Montpellier, Montpellier, France
b Department of Psychology, College of the Holy Cross, Worcester, Massachusetts, USA
*Corresponding author.
E-mail address: zhaohong838@gmail.com (Z. Zhao)

Introduction Nowadays, high-technology (utilization of avatars or robots) has been becoming widely used in medical rehabilitation programs. The biggest advantage of the high-tech agents is to help designing individualized rehabilitation plans and saving caregivers’ time. Since previous research in human-human interaction showed that the way individuals interact with others is influenced by the physical attractiveness of the other people (i.e. [1]), the present study aims to investigate whether interpersonal coordination is influenced by the physical attractiveness of virtual agents.

Methods 34 healthy participants coordinated with a physically attractive virtual agent and a less attractive virtual agent on a Wacom tablet. Agents were shown in a static (picture) or in a dynamic (video) form. Participants were instructed to perform in-phase or anti-phase coordination with the agents at the 100 or 150% of their own preferred frequency. At the same time, a reaction time task (on the agent’s forehead) was answered simultaneously in order to attract participants’ attention to the physical attractiveness of the agent.

Results Results showed that when coordinating at the preferred frequency, participants showed the most stable interpersonal coordination with the moving attractive agent as compared to other static or moving agents.

Discussion Our results suggest that it is critical to take into account the physical attractiveness of the agents when using them...