single stroke at least 12 months previously, with recovery of Indoor walking and home return. Fatigue was assessed by a multidimensional scale, the MFI-20 which allowed determining the fatigue level in its four dimensions (general fatigue, mental fatigue, reduced activity and lack of motivation). We examined possible associations between the level of fatigue in each of its dimensions and different parameters related to the patient (age, sex, body mass index), to the brain injury (etiology, side, duration), and to other stroke complications (motor deficit, disability level, anxiety, depression, sleep disturbance and pain). Disability was determined by the Barthel Index score. Anxiety and depression were assessed by the HAD scale.

Results.—The different domains of fatigue identified by the MFI-20 were present at equivalent levels in the patients without predominance of one domain over the others. “General fatigue” and “mental fatigue” were strongly correlated with anxiety and depression. “Lack of motivation” was correlated with sleep disturbance (P = 0.047) and with depression (P = 0.047). “Reduced activity” was correlated with anxiety (P = 0.02). On the other hand, there were no significant correlations of the different domains of fatigue with the other parameters studied.

Conclusion.—Post-stroke fatigue is multidimensional. Some comorbidities (depression, anxiety, sleep disorders) that are accessible to treatment are associated with a higher risk of fatigue in each of its dimensions.

Reference


P043–EN
Perception of action by stroke patients in virtual realities using minimal kinematic displays
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Keywords: Stroke; Perception of action; Kinematic cues; Virtual reality

Objective.—The aim of the present research is dual-fold: first, to provide a better understanding of perception of action by stroke patients; second, to gain more insight about which kinematic cues are relevant for action recognition in virtual displays.

Method.—To do so, naive stroke patients and an aged matched healthy control group had to assess the level of attainment of pointing movements displayed on a computer screen. Two different kinematic displays were used: a stick diagram and a dot end-point representation. The displayed movements were from patients with very severe, severe, moderate and mild hemiparesis, or healthy subjects.

Results.—It was shown that stroke patients were able to distinguish between healthy and several attained movement trajectories by observation of minimal kinematic displays, although with a larger variability than controls. Subsequently, patients succeeded better in doing so when observing an end-point directed trajectory than when observing a target-directed trajectory.

Discussion.—These findings should be taken into account when implementing avatars in virtual reality (e.g., constructing serious games) for upper-extremity stroke rehabilitation, in order to make sure that the moving avatars provide neither too little, nor too much information to the attained observer.


P044–EN
TLS-Coping. A new validated short and specific coping scale in multiple sclerosis
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Keywords: Multiple sclerosis; Scale; TLS-Coping10

Patients.—Suffering from multiple sclerosis (MS) resort to a coping strategy deeply modifying their general perceived Quality of life (QoL). Coping and QoL assessment tools are essential to implement appropriate behavioral cognitive therapy programmes. However, the currently validated Coping with Health Injuries and Problems (CHIP) scale has poor reliability in MS Context.

Objective.—To validate a short and specific coping scale Two-Lives Scale: TLS Coping 10:
- easy to use and easy to score in routine medical practice;
- to bring out the link between the respective coping and QoL scores.

Patients and methods.—We conducted a multicenter cross-sectional study of 521 consecutive MS patients. We used the CHIP, MOS-SF36 scales and TLS coping scale.