CO0325
Physical activity and inactivity level of stroke patients including in physical activity incitation program

David Chaparro 1, *, Justine Lacroix 1, Benoit Borel 1, Jean-Yves Salle 2, Benjamin Kammoun 1, Jean-Christophe Daviet 2, Stéphane Mandigout 1
1 Université de Limoges, laboratoire HAVAE EA 6310, 87000 Limoges, France
2 CHU de Limoges, hôpital J. Rebeyrol, médecine physique et de réadaptation, Limoges, France
* Corresponding author.
E-mail address: dvidch7@gmail.com (D. Chaparro)

Objective Physical activity (PA) and exercise are two successful approaches to reduce sedentary behavior and risk managing in stroke patients. The aims of the study are to evaluate PA and physical inactivity levels in post-stroke patients and to correlate PA parameters with gait performance, fatigue, anxiety, and anthropometry parameters in subacute phase of stroke recovery.

Material/Patients and methods Preliminary analysis of 24 patients in PA incitation program (mean age: 61.3 ± 13.85 years; weight 78.2 ± 12.8 kg; stroke delay: 76.5 ± 37.7 days). Each patient achieved 6 minutes walking test (6MWT), hospital anxiety and depression scale (HADS), multidimensional fatigue inventory questionnaire (MFI-20) and body composition assessment before the hospital discharge. Total energy expenditure (TEE), number of steps (NS), sitting time (ST), activity energy expenditure (> 3 MET) (AEE) and physical activity time (PAT) per day were collected at home by the SenseWear Armband monitor system during the first (T1) and sixth (T6) month of PA incitation program.

Results ST and PAT reduced significantly between T1 and T6 respectively (65.6 ± 89.5 and 35.3 ± 48.6 min, P = 0.048) and (94.7 ± 67.3 and 75.5 ± 56.7 min, P = 0.049). In contrast, NS increased significantly between T1 and T6 (3750 ± 2440 and 4415 ± 3810 steps, P = 0.044). TEE were positively associated with 6MWT and HADS (r = 0.488, P = 0.0182 and r = −0.401, P = 0.04 respectively) at T1. Furthermore, PAT was positively associated with the body lean mass (r = 0.48, P = 0.017) and weight (r = −0.502, P = 0.0124) at T1 and (r = −0.524, P = 0.008) at T6. In addition, there is positive correlation between AEE and the percentage of muscular mass at T6 (r = 0.513, P = 0.0123). Finally TEE, NS, AEE and PAT were correlated with MFI at T6 (r = −0.403, r = −0.457, r = −0.527, r = −0.594, P < 0.05).

Discussion - Conclusion These preliminary results revealed that stroke patients included in PA incitation program decreased ST and increased NS despite PAT reduction. Even the presence of PA incitation program, PA is higher in patients with a few physical limitations than patients with a physical and psychological impairments.

Keywords Stroke; Activity; Physical activity; Energy expenditure
Disclosure of interest The authors have not supplied their declaration of competing interest.
http://dx.doi.org/10.1016/j.rehab.2016.07.171

CO0326
Accelerometers are they accurate for the estimation of total energy expenditure over activities of daily living in stroke survivors?

Mancex Compagnat 1, *, Jean-Christophe Daviet 1, Jean-Yves Salle 1, Stéphane Mandigout 2, Justine Meuret 2, Jérémie Bordes 1
1 CHU de Limoges, médecine physique réadaptation, Limoges, France
2 Laboratoire HAVAE (EA 6310), université de Limoges, Limoges, France
* Corresponding author.
E-mail address: macex.compagnat@icloud.com (M. Compagnat)

Objective The purpose of this study was to examine the accuracy of several accelerometers commonly used in post stroke studies [1] to estimate the total energy expenditure (TEE) over activities of daily living.

Material/Patients and methods Thirty-eight participants (age: 65.7 ± 13.5; BMI 26.7 ± 6; Barthel Index: 69 ± 21) with various aged strokes were recruited and simultaneously monitored with accelerometers Armband Sensewear® (multisensory device); StayHealthy® RT6TM; Actigraph GT3X + B® (tri axial devices) and portable metabolic system (Cortex Mémentax 3B®). The devices were placed on the non paretic ankle, hip and wrist as recommended. The participant performed four routine activities (transfers, manual tasks, walk, up and down stairs). TEE estimated by accelerometers was compared to the TEE measured by criterion method.

Results The Armband Sensewear® device obtained the better accuracy with a mean difference of 2.8% for the sum of all the activities. However, the lower and upper limits of agreement were high, around 100% of the TEE. All of the other devices had a statistic difference with the criterion method.

Discussion - Conclusion This study reported strongly differences for the accuracy of accelerometers. The Armband Sensewear® device was better even if the dispersion of its estimates was high and lead to caution with its use for estimation of TEE in daily living after stroke.

Keywords Accelerometer; Energy expenditure; Daily living; Indirect calorimetry; Stroke
Disclosure of interest The authors have not supplied their declaration of competing interest.
Reference
http://dx.doi.org/10.1016/j.rehab.2016.07.173

CO0327
Management of stroke patients by general practitioners: An observational study

Bertrand Glize 1, Étienne Santos 1, *, Sophie Broussy 2, Igor Sibon 3, Pierre-Alain Joseph 1, Patrick Dehail 1
1 CHU, MPR, Bordeaux, France
2 Université de Bordeaux ISPED, Bordeaux, France
3 CHU, UNV, Bordeaux, France
* Corresponding author.
E-mail address: santosetienne29081985@gmail.com (É. Santos)

Objective Post-stroke medical management, defined by national and international guidelines, involves many professionals, allowing optimal secondary prevention. The general practitioner is as a major player in this management. The improved of this management appears as the new challenge following the stroke Plan 2009–2014.