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#### ISPR8-1032

#### Risk of pressure ulcers in persons with tetraplegia and regional experience: Analysis of a long-term French survey

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Introduction/Background Pressure ulcer risk assessment provides an indicator of quality of care in French health establishments. The predictive value of clinical assessment tools is lower for people with spinal cord injury (SCI). We hypothesized that skin complications would be less frequent in traumatic SCI patients with tetraplegia (TSCIt) who were initially managed in French regions with a high level of specialized SCI rehabilitation experience.

Material and method First, we used the most recent French epidemiological survey of patients with SCI to determine a "Level of Regional Experience in Specialized Physical Medicine and Rehabilitation" (LRE). We then studied the medical and social variables reported in the Tetrafigap survey (which compiled a cohort of TSCIt, to assess their trajectory and life conditions following the return to community life) using univariate analysis according to these LREs (Chi² test using a significance threshold of P < 0.05). We finally performed a series of logistic regressions to determine the link between LREs and pressure ulcers.

Results Management in high-LRE regions was associated with a lower occurrence of pressure ulcers during early treatment and in the long-term (on average, 8 years post-trauma).

Conclusion Using pressure ulcers as a marker, our study demonstrated the protective link of regional experience of the early management of TSCIt. In our opinion, efforts should first prevent a dilution effect through holistic health care for SCI, within the scope of a regional organization that would link referral centers and local health care networks.

Keywords Cohort studies; Surveys; Prevention Disclosure of interest The authors have not supplied their declaration of competing interest.

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## A3.04 Neurological and mental health conditions—Autoimmune and inflammatory neurological conditions (e.g. multiple sclerosis)

#### ISPR8-1955

# Benefits of a program associating exercise therapy and therapeutic education on fatigue in multiple sclerosis



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Introduction/Background Literature findings have proven the efficacy of exercise training on fatigue symptoms in multiple sclerosis (MS). Other studies showed a benefit of educational programs on fatigue management in MS. A 2-week hospital-based rehabilitation program associating both of these aspects was created in 2016. The aim of this study was to analyze the efficacy of this program.

Material and method Pre- and post-prospective observational study of patients with MS of EDSS below 7 presenting with disabling fatigue. Patients were evaluated before and 3 months after the program. Assessments included the 6-min walking test, the maximal oxygen uptake (VO<sub>2</sub>max) in a cycling exercise test, the numerical scale (NS) of fatigue, the Multiple Sclerosis Fatigue Self-Efficacy Scale (MSFSE, max = 100), which assesses patients' subjective feeling of self-efficacy to manage their fatigue, and level of weekly sport or physical activity.

Results Twenty-seven patients completed the program and 17 received the 3-month assessment (10 evaluation pending). Mean age was 43, mean EDSS was 3.4. Among the 17 patients, 5 suffered a relapse of MS before the 3-months follow-up. Mean 6-minutes walking distance was  $398\pm73$  m pre-program and  $407\pm87$  m at 3 months. Mean VO<sub>2</sub>max before was  $71\pm24\%$  and  $76\pm24\%$  after. VO<sub>2</sub>max increased for 78% of patients (n=9). Mean fatigue NS remained stable at 5/10. Mean MSFSE score increased from  $56\pm20$  to  $75\pm25$ . Among patients who had no physical activity before the program, 75% had started a regular activity, which was maintained at 3 months. Among patients who had a previous physical activity, 44% increased their activity level.

Conclusion This 2-week program including education and exercise training did not seem to modify walking ability and fatigue, but patients improved their physical activity and their feeling of self-efficacy. It thus appeared that the educational aspects of the program were the most beneficial on the long term.

Keywords Multiple sclerosis; Fatigue management; Exercise retraining

*Disclosure of interest* The authors have not supplied their declaration of competing interest.

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