associated with a fecal incontinence. NBD average score was $5 \pm 4$ (median 4), 8 patients had a score higher than 10. On a Likert scale, discomfort is considered moderate or severe to 41.3% and constraint related to constipation moderate or severe for 40%. 61% of patients report complications: abdominal bloating for 16 patients, pain for 13 and hemorrhoid problems for 9. No statistical link was found between the existence of constipation and age, sex, MS duration, MS type or EDSS. Constipation is a common symptom in MS with a major impact in everyday for patients with MS.

**Discussion/conclusion** We found a prevalent consistent with literature data. In our sample, constipation is more common than urinary problems. It does not seem to be associated with the developing profile of the disease. This implies an early screening for appropriate care to minimize the clinical consequences of bowel disorders.

**Keywords** Multiple sclerosis; Constipation; Prevalence

**Disclosure of interest** The authors declare that they have no competing interest.

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**CO098**

**The functional performance status during weekdays and weekends in persons with multiple sclerosis**

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**Objective** Functional performance reflects what an individual does in his/her daily life, providing a crucial dimension of the environmental role on his/her function. The assessment of the functional performance status of persons with multiple sclerosis (PwMS) is a useful tool to optimize healthcare. This concept does not seem to be extensively explored in this population [1,2]. This study aimed to determine the level of activity of PwMS during weekdays and weekends, and to establish associations between clinical and functional parameters and this level of physical activity.

**Materials/patients and methods** 60 PwMS and 41 healthy persons participated in this study. Their physical activity in real-life condition was assessed with an accelerometer ActiGraph (WTG3X) for 7 days. For the clinical and functional evaluations, the EDSS disability scale, quality of life, fatigue, gait, six-minute walk test (6MWT) and timed up and go TEST (TUG) were assessed. Groups were compared in terms of accelerometer, using a student’s t test. In order to verify the relationship between clinical and functional parameters and the level of real-life activity, person’s correlation tests were conducted.

**Results** The level of activity between PwMS for weekdays, weekends, Saturdays and Sundays was significant smaller compared with the healthy group ($p = 10^{\pm 10.5}$, $d = 0.95 \pm 1.76$). PwMS had a constant level of activity throughout the week, whereas the healthy group increased its level of activity on Saturdays ($p = 0.04$, $d = 0.69$). The level of activity was correlated in descending order with EDSS score, body mass index, and gait velocity at fast condition, 6MWT and TUG.

**Discussion/conclusion** This study showed that PwMS during the week performed less activity than their healthy peers. They had a stable level of activity throughout the week, contrary to healthy persons. More information is required to determine if it involves a patient’s coping mechanism (performance < the maximal capacity) or a limitation in performance (performance – to the maximal capacity). It could be necessary to develop programs to facilitate physical activity and participation during the weekdays, but especially during weekends.

**Keywords** Multiple sclerosis; Gait; Physical activity; Prevalence

**Disclosure of interest** The authors declare that they have no competing interest.

References

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**CO099**

**“Gait responder” to fampridine, a too restrictive concept?**

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**Objective** Fampridine is used as a symptomatic treatment in patients with multiple sclerosis (PwMS) gait disorders. Some clinical trials reported a positive effect on cognitive function especially on information-processing speed (IPS) or on fatigue. The aim of our clinical trial was to evaluate the effect of fampridine on IPS.

**Material/patients and methods** 60 PwMS with an EDSS score between 4 and 7 were included in a prospective monocentric open label trial. Two identical measures were conducted a week apart before initiating treatment in order to take into account the test–retest effect. Then, patients were treated for at least 14 days and were evaluated twice (again a week apart). Two tests were used to measure IPS: symbol digit modalities test (SDMT) and verbal fluencies test (VFT). The gait was measured at fast condition and the fatigue was evaluate using the modified fatigue impact scale (EF-SEP). Patients were divided into two groups regarding to the increase of gait speed after treatment: gait responders (GR) (more than 17.2%) and non-gait responders-NGR (less than 17.2%). The second group was also divided into two groups: those continuing treatment (on clinician appreciation) called others responders (OR) and those who stopped treatment called no responders (NR). For statistical analysis, a one-way analysis of variance for repeated measurement was used. When significant effects existed, Turkey post-hoc tests were performed.

**Results** Mean EDSS was $5.25 \pm 1.07$. 24% of PwMS were qualified as gait responder (mean speed improvement of 49.4%). Those who improved their gait velocity were the most affected by the disease (regarding to EDSS). Fatigue and IPS improvement was found in GR, NGR and OR after treatment. It could be observed beyond 14 days of treatment (SDMT in GR, NGR and OR and EMIF-SEP in NGR). No improvement was shown in NR.

**Discussion/conclusion** Our results suggest that fampridine could have an effect on cognition disorders and fatigue even on those who are not gait responder.

**Keywords** Multiple sclerosis; Fampridine; information-processing speed; SDMT; Verbal fluencies; Fatigue

**Disclosure of interest** The authors declare that they have no competing interest.

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