high (CTL, 1.93 ± 0.18 step/s, PD, 2.13 ± 0.24 step/s, p = 0.036). Step length was decreased in both NPH and PD groups (CTL, 0.61 ± 0.10 m, NPH, 0.43 ± 0.15 m, p = 0.014; PD, 0.49 ± 0.17 m, p = 0.059).

Fast speed
The relative contribution of cadence (CDI) and step length (SLI) to speed increase was similar in CTL and NPH groups. In the PD group, CDI was reduced and SLI was increased compared with CTL and NPH groups (NPH vs. PD, CDI, P = 0.058; SLI, P = 0.052).

Conclusions:– The decrease in comfortable gait speed and the increase in step width may be discriminant for the NPH diagnosis. In subjects with NPH, the relative contributions of cadence and step length to speed increase are spared, in contrast with moderate PD.

References

http://dx.doi.org/10.1016/j.rehab.2012.07.676

CO23-005-e
Can the strop test for dual task locomotor performance reveal the existence of cognitive decline?
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Keywords: Locomotion; Stroop; Inhibition; Dual-task

Aim.– The Stroop test consists in a mental inhibition task that is affected by normal and pathological aging [1]. The objective is to determine whether or not the Stroop interference effect is heightened in various walking situations according to the type of cognitive impairment and if it is able to detect cognitive impairment.

Method.–
Population
Thirty-five older aged, autonomous volunteers without any pathology likely to influence walking or posture were given a psychometric test (MMSE, BREF, Dubois, WAIS, electronic version Corsi Block Test CBT) and an instrumented 10 m walking test (GaitRite). We divided the participants into 3 groups according to their levels of performance with regard to the executive functions (EF): 9 low EF patients (memory and EF impairment), 17 older age high EF subjects (healthy older) and 9 middle EF patients.

Protocol
In dual-task performance (DT), we created the Walking Stroop Carpet (WSC).

We registered gait parameters of the subjects with an electronic carpet during displacement on stepping targets constituted by words and colors on the floor. We reached a good level of agreement between the electronic carpet and the GaitRite® (MWalCT = 4.0) than in the CBT (MCBT = 4.8).

Conclusions.– In all the tests, alterations of multi-domain MCI performances (vs. those of the other groups) show that the cognitive functions involved in the dual-task W-CBT associate working memory with the other executive functions.

Reference

http://dx.doi.org/10.1016/j.rehab.2012.07.678

CO23-007-e
Interest of reeducation in knee osteoarthritis: A comparative study between elderly and young subjects
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Keywords: Osteoarthritis; Rehabilitation; Functional assessment

Introduction.– Knee osteoarthritis is a public health problem; its management must be multidisciplinary and personalized.

Objectif.– To underline the importance of rehabilitation in the treatment of knee osteoarthritis in elderly compared to young patients.

Materials and methods.– Case-control study conducted in the service of PMR in Military Hospital of Tunis. The patients were divided into two groups, Elderly patients aged more than 70 years and young patients aged between 30 and 50. The assessment of functional impairment was assessed by VAS pain, WOMAC index and LEQUESNE index. All patients underwent a rehabilitation program conducted in three sessions per week for two months.

http://dx.doi.org/10.1016/j.rehab.2012.07.677