age = 81.84 ± 7.97 years) evaluated from 2004 to 2010 in the Padova district (Italy) were included. A computer-based randomized selection identified a Development Cohort: 7876 subjects (M = 2909, F = 4967) and a Validation Cohort: 4144 subjects (M = 1506, F = 2638). The MPI-SVaMA was calculated by an algorithm based on information on nine domains included in the SVaMA, i.e. cognitive status (SPMSQ), activities of daily living (ADL), motility-Barthel scale, pressure sores risk (Exton-Smith scale), nursing care needs, social support, age, gender and main diagnosis. The MPI-SVaMA score ranged from 0 to 1 and three grades of risk were calculated. Mortality and institutionalization rates at one-month and one-year were observed. Results: The C-index discriminatory power for mortality of MPI-SVaMA was 0.828 (95%CI 0.817–0.838) and 0.832 (95%CI 0.818–0.843) at one-month and 0.791 (95%CI 0.784–0.798) and 0.792 (95%CI 0.783–0.802) at one-year in Development and Validation Cohorts, respectively. The C-index discriminatory power for institutionalization was 0.798 (95%CI 0.787–0.809) and 0.784 (95%CI 0.768–0.799) at one-month and 0.788 (95%CI 0.780–0.796) and 0.779 (95%CI 0.768–0.790) at one-year in Development and Validation Cohorts, respectively.

Conclusion.– The MPI-SVaMA showed high accuracy and good calibration in predicting short- and long-term mortality and institutionalization risk in community-dwelling older subjects.

Disclosure.– No significant relationships.

http://dx.doi.org/10.1016/j.eurger.2012.07.402

0039

Effect of aldosterone blockade on physical function in functionally impaired older people without heart failure

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Introduction.– The decline in muscle mass and function with ageing is a major health problem leading to poor physical function, disability and institutionalisation. Many older people are sedentary and do not undertake adequate exercise therefore exploring pharmacological interventions to improve physical function is important. Evidence suggests a potential role for renin-angiotensin–aldosterone-system blockade in improving muscle and cardiovascular function. We therefore hypothesised that aldosterone blockade would improve physical function in older people without heart failure.

Methods.– Study type: double-blind, parallel-group randomised controlled trial. Study population: community dwelling people < 65 years with functional impairment. Intervention: 25 mg spironolactone or placebo for 20 weeks. Primary outcome: change in 6 minute walking distance over 20 weeks. Secondary outcomes: changes in Incremental-Shuttle-Walk test, Timed-get-up-and-go test, health-related-quality-of-life EuroQol (EQ-5D and visual analogue scale) and Functional Limitation Profile, and Hospital Anxiety and Depression Scale.

Results.– One hundred and twenty participants, 54% male, mean age 75(SD6) years were recruited. At 20 weeks, there was no significant difference in change in 6 minute walking distance between spironolactone and placebo groups (mean change −3.2; 95% CI −28.9 to 22.5; P = 0.81). EuroQol EQ-5D significantly improved in the spironolactone compared to placebo group (mean change 0.10; 95% CI 0.03 to 0.18; P < 0.01). On subgroup analysis of EQ-5D, 35% of participants on spironolactone reported a reduction in pain/discomfort compared to 5% on placebo (P < 0.01). There were no significant differences in other outcomes.

Conclusion.– Spironolactone did not improve physical function in older people without heart failure. Spironolactone however improved quality of life potentially through reducing pain.

Disclosure.– No significant relationships.

http://dx.doi.org/10.1016/j.eurger.2012.07.403

0040

Increasing variability in sustained attention is associated with frailty in the older adult population

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Introduction.– Sustained attention is a fundamental executive function. Previous evidence suggests frail older people perform poorly on tasks that place a higher demand on resources of attention. We investigated whether increasing sustained attention variability was associated with frailty in a population representative sample of adults aged ≥ 50 years using the Sustained Attention to Response Task (SART).

Text.– Four thousand seven hundred and eighty-five participants of The Irish Longitudinal Study on Ageing (TILDA) completed a comprehensive health assessment. Frailty was defined by having ≥ 3 of low gait speed, low grip strength, unintentional weight loss, self-reported exhaustion and low physical activity. Mean and variability of reaction time (RT), commission and omission errors were recorded during a fixed-SART. The Fast Fourier Transform (FFT) procedure was used to characterise variability associated with the arousal and vigilance aspects of sustained attention. Among the Irish population ≥ 50 years of age, 3.7% were frail and 35.3% were pre-frail. Non-frail participants had significantly less RT variability (P < 0.001), and fewer commission (P < 0.001) and omission (P < 0.001) errors than their pre-frail and frail counterparts. Regression analyses, adjusted for age and gender, revealed variability associated with the vigilance aspect of sustained attention was strongly associated with pre-frailty (P < 0.001: OR = 1.10, 95% CI: 1.06–1.15) and frailty (P < 0.005: OR = 1.08, 95% CI: 1.04–1.13). Greater sustained attention variability was strongly associated with pre-frailty and frailty. It may provide a novel cognitive marker for identifying frailty risk, enabling early detection and the provision of intervention strategies.

Disclosure.– No significant relationships.

http://dx.doi.org/10.1016/j.eurger.2012.07.404

0041

Use of inappropriate drugs in elderly patient with severe cognitive impairment


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