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CONCOMITANT CHANGES IN CLINICAL AND POSTUROGRAPHIC DATA IN ELDERLY FALLERS DURING THE COURSE OF AN IN-HOME ANTI-FALLING MULTIMODAL PROGRAM - A PRELIMINARY INVESTIGATION. Abstract number: P06

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The objective of this work was to evaluate -as a preliminary study- the effectiveness in terms of fall reduction of an in-home strategy that we have developed for elderly fallers. We also aimed at finding links between the expected changes in the data obtained in static posturography and in clinical balance tests through our program. Twelve elderly patients living at home who were diagnosed as a fallers (5 males and 7 females; 77.9 ± 4.1 years) participated in the study. Our multi-modal intervention lasted for 6 months and before and 12 months after its start an evaluation was performed using cognitive, clinical balance tests (i.e. Berg Balance Scale, Balance One leg, Timed up and go, and Functional reach tests) and static posturography (where the area of body sway, velocity, medial-lateral and antero-posterior amplitudes were recorded twice, first with the subject's eyes opened and then with eyes closed). Among our 12 patients who were diagnosed as fallers, 8 became non-fallers. When comparing data obtained after the intervention with those obtained before we found significant changes in all of clinical balance tests and in the posturographic-derived variables indicating improvements in the balance control in our group of subjects. We also found significant correlations between the changes in the Berg Balance Scale scores and the changes in the area of body sway data, as well as with the changes in the data obtained in anteroposterior amplitude both in the conditions of eyes opened and eyes closed. In conclusion, we have in a prospective way shown the relevance of our anti-falling intervention at home and of the use of posturography for clinical follow-up.

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