IMBALANCE IN ELDERLY PATIENTS: A STUDY USING COMPUTERIZED STATIC AND DYNAMIC POSTUROGRAPHY.

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Introduction: Imbalance related falls are a major cause of injury, death and emergency room visits in people over the age of 65 years. However, balance disorders in this population are largely ignored.
Methods: Balance testing was done using FallTrak(R). Patients performed four sensory organization tests: normal and perturbed stability, both with and with visual cues. Each subtypes normal stability - eyes open (NS/EO), normal stability - eyes closed (NS/EC), perturbed stability - eyes open (PS/EO), and perturbed stability - eyes closed (PS/EC) were performed for 30 seconds. For each surface, patients performed the test first with their eyes open and second with their eyes closed.
Results: Records of 103 consecutive patients that underwent CDP were retrospectively reviewed. Their ages ranged from 65 to 93 years. Of the total, 57 (55.3%) were male and 46 (44.7%) were female. Of these, 90 (87.4%) had abnormal results on CDP. Test findings were classified as normal or abnormal based on age-matched normative data. NS-EO was abnormal in 53 (51.5%), NS-EC was abnormal in 68 (66.0%); both NS-EO and NS-EC were abnormal in 40 (38.8%); PS-EO was abnormal in 40 (38.8%) and PS-EC was abnormal in 25 (24.3%). Both PS-EO and PS-EC were abnormal in 10 (9.7%). NS was normal in 22 (21.4%) and PS was normal in 46 (44.7%). Both NS and PS were normal in 13 (12.6%) patients.
Conclusion: The majority of patients (87.4%) ages 65 and older exhibit balance impairment. Balance training should help improve posture and prevent falls in this population.