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POSTURAL INSTABILITY IN SCHIZOPHRENICS: A STUDY USING COMPUTERIZED STATIC AND DYNAMIC POSTUROGRAPHY

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Introduction: Schizophrenic patients have a high incidence of falls and fractures. We evaluated postural stability in schizophrenic patients using computerized static and dynamic posturography (CDP).

Objectives: To measure normal and perturbed stability in schizophrenics.

Aims: To objectively demonstrate postural abnormalities in schizophrenics.

Methods: We retrospectively evaluated CDP studies on 54 consecutive schizophrenic patients. CDP was done using FallTrak (R). Patients performed 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) for 30 seconds each. Findings were classified as normal or abnormal based on age-matched normative data.

Results: The ages ranged from 31 to 77 years. There were 34 (63.0%) males and 20 (37.0%) females. Of the total 54 patients, 48 (88.9%) exhibited abnormalities on CDP testing. NS-EO was abnormal in 29 (53.7%), NS-EC was abnormal in 37 (68.5%); both NS-EO and NS-EC were abnormal in 25 (46.3%); PS-EO was abnormal in 27 (50.0%) and PS-EC was abnormal in 20 (37.0%). Both PS-EO and PS-EC were abnormal in 14 (25.9%). Both PS and NS were abnormal in 26 (48.1%). NS was normal in 13 (24.1%) and PS was normal in 21 (38.9%). Both NS and PS were normal in 6 (11.1%) patients.

Conclusions: Most schizophrenic patients show abnormalities in both normal and perturbed stability when tested using static and dynamic posturography. Balance was normal in only 11.1 % of the patients. Further studies are needed to evaluate the clinical significance of these findings.