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THE USE OF STATIC POSTUROGRAPHY CUT-OFFSCORES TO PREDIC THE RISK OF FALLING IN OLDER ADULTS LIVING IN SOUTH- EASTERN POLAND

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Introduction: Falling is the most common accident that occurs in daily living and the second leading cause of unintentional injury death worldwide. The complexity of the risk factors associated with falling makes older people at risk of falling difficult to identify. The aim of the study was to identify the cut-off scores of standing posturography measures that can be used to predict the risk of falling in older adults.

Methods: This observational study involved 267 elderly people aged 65 to 85 years (73.99 SD 7.51) living in south-eastern Poland. The subjects were divided into two groups: a group with a high risk of falling and a group with a low risk of falling. Postural stability was assessed during eyes-open and eyes-closed trials using the two-plate stability platform CQ Stab 2P.

Results: The best accuracy, sensitivity and specificity were observed for sway path, anterior-posterior sway path and medial-lateral sway path with open and closed eyes. The clinical cut-off score to predict the risk of falling was 350.63 for sway path with open eyes, 272.64 for anterior-posterior sway path and 159.63 for medial-lateral sway path. The clinical cut-off score for sway path with closed eyes was 436.11.

Conclusions: Static posturography screenings in clinical practice may also be useful for detecting typical balance changes in older adults.

Keywords: aged, diagnostic techniques, postural balance