Fall Risk Evaluation in Stroke

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Falling is one of the most common complications in stroke patients. It is very important to determine falling risk and to take necessary precautions on time because falling causes daily life activities to be restricted and results in fractures at a rate of 23%–50% (1). It has been reported that 14%–65% of stroke patients fall during their hospitalization and 37%–73% fall at home within the first 6 months after being discharged; this rate is 36% in chronic patients (2,3).

Falls in the hospital mostly occur in the first week and particularly at night. Falls after being discharged from the hospital are frequently seen within the first 2 months. It has been observed that falls in hospitalized patients frequently occur during transfers to chair, bathroom, and toilet and while turning in bed (2). Risk factors for falls in hospitalized patients include mobility and balance problems, confusion or agitation, incontinence, a previous history of falls, use of sedatives and antihypertensive drugs, aphasia, disturbed spatial perception, and severe neurological loss. In contrast, risk factors for falls in stroke patients after discharge include disturbed balance, dependence in daily activities, neglect phenomenon, depression, multitasking (such as speaking while walking), and jumping (3). Use of auxiliary equipment, walking a long distance at the same speed as a short distance, jumping, and dependence in daily activities have been found to be effective in preventing falls in a society (4). In the studies conducted, no relationship was found between age, gender, and the type and region of stroke and falls.

Predicting falling risk in stroke patients in advance and taking necessary precautions are included in our rehabilitation goals. Accordingly, some studies have been performed on the usability of various scales for estimating falling risk in stroke patients. Based on the results of these studies, it can be suggested that Falls Efficacy Scale (FES) (5), Stroke Assessment of Fall Risk (6), Fall Risk Assessment Tool (FRAT) (developed for the elderly population) (7), or Tinetti Performance-oriented Mobility Assessment (8) can be used for estimating falling risk. Of these scales, FRAT is particularly appropriate for our routine evaluations because it is easy to use, allows multidirectional assessment, and offers corrective suggestions. On the other hand, FES has been found to be a simple and valuable scale because it predicts falling risks within the first 6 months after discharge according to the values obtained in the first month (9).

Hanger et al. (10) found 4 different types of falls in stroke patients, and they offered various suggestions such as the use of hip pads and elevation of bedheads. This study is valuable because it emphasizes the large specrtum of patients and the necessity for personal precautions and rehabilitation protocols rather than a standard approach. As a result, stroke patients should be evaluated multidirectionally. Patients should be comprehensively assessed in terms of cognitive, motor, and functional levels as well as medications, social environment, and home environment during hospitalization and after discharge from the hospital. Personal rehabilitation programs should be designed aiming to prevent falls. The patients and their families should be educated regarding the prevention of ambulation in the society, prescription of personal auxiliary devices and orthoses, and preparation of home environment.

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