The importance of holistic evaluation of older patients who fall

La importancia de valorar las caídas del paciente anciano de forma holística

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Falls are a common problem in the population aged 65 years and older and are a major cause of disability, mortality, and premature institutionalization.1 The frequency of falls increases with age and frailty. Thirty percent of people over 65 years and 50% of people over 85 years fall at least once a year.2 The previous study based on the FALL-ER registry by Miró et al.3 highlighted the high frequency of immediate consequences suffered by elderly patients seen in the emergency department after a fall. The FALL-ER registry is of great epidemiological interest because of its large prospective multicenter cohort of patients studied in the emergency department (ED). It found that falls in this population are a public health problem and suggests that EDs have a relevant role in both detection and prevention.

In this regard, in the present issue of Emergencias, García-Martínez et al.4 investigate the characteristics associated with a new fall after emergency care for an unintentional fall and develop a risk model to predict them. They used the FALL-ER registry, a prospective multicenter cohort of 1313 patients aged 65 years or older, of whom 147 (11.2%) had had a new fall after the index episode. This is a cohort of elderly persons (79 years), 70% of whom were women, with comorbidities, polymedicated and 6% from the residential setting, which can be considered representative of elderly patients seen in the emergency department for falls.

The variables independently associated with a new fall were: fall in the previous 12 months, neurological disease, anemia, taking non-opioid analgesics, fall at home and during the night, head injury and need for help to get up from the chair. The authors develop a predictive model of new falls based on these seven variables. The overall diagnostic accuracy of the indicator, with an area under the receiver operating characteristic curve of 0.688 (95% CI 0.640-0.736), was moderate for predicting new falls, which limits its use in clinical practice, as the authors point out. Nevertheless, this study provides an overview of the factors associated with future falls that should be considered.

We agree with the authors that there may be other variables other than those included in this study that are also associated with the risk of falls. Variables related to the anamnesis, physical examination and vital signs that have not been considered would improve the discriminatory capacity of the indicator. In this sense, the assessment of frailty from a multidimensional point of view could be one of them. Frailty is defined as a progressive age-related deterioration and is characterized by a loss of physiological reserve that results in an inability to maintain the necessary homeostasis in stressful situations.5 It is a good predictor of adverse events and disability in the short, medium, and long term,6 even better than other frequently used parameters such as comorbidity or multimorbidity.7 Frailty can be detected, prevented, and reversed with specific interventions.8

Falls are one of the adverse outcomes of frailty. Half of the people who fall are frail. Numerous studies have shown that the more frailty the greater the risk of falls.2,9 In the study by Hollinghurst et al.2 with 781 081 participants, people with severe frailty had a higher risk of being seen in the ED than those without frailty (odds ratio of 2.62 with a 95% confidence interval of 2.56 to 2.68).

Although it is true that the authors have approximated frailty by recording previous functional status with the Barthel Index < 90, the presence of geriatric syndromes with self-referenced questions, chronic drug use, and assessing physical frailty according to the need for help to get out of bed or out of a chair or the inability to walk in tandem, it would be advisable to use multidimensional frailty tools that are easy to apply in the ED, such as the Identification of Senior at Risk (ISAR),10 the Clinical Frailty Scale (CFS),11 the VIG-Fragile Index12 or the 3D/3D+ tool.13

The number and pharmacological groups should be part of any assessment for falls in the elderly. Chronic use of more than 5 medications and psychotropic medications are the two factors most frequently associated with the risk of falls and related injuries.14 The de-prescription of fall-risk-increasing drugs (FRIDs) has been shown to be an effective preventive measure in reducing falls.15

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It is interesting to pay attention to the results provided by the authors on the characteristics related to the fall and its immediate consequences. Eighty-two percent of the patients were seen in the trauma/surgery area and their attention was focused more on the trauma than on the reason for the fall. This would explain why osteoarticular examination (86%) and radiology (86%) were the most frequently performed examinations. It would have been interesting to know whether these results were different in patients seen in the medical area. In this regard, only 27% of patients underwent an electrocardiogram, when rhythm disorders are one of the main reasons for falls in the elderly. It is not clear how many patients and how blood pressure was taken and whether orthostatic hypotension was ruled out. It is also not detailed whether patients with syncope were excluded.

We fully share the authors’ opinion on the need to modify the urgent care model for elderly patients presenting to the ED for an unintentional fall. The care of these patients should not focus solely on the reason for consultation, but on the identification of the causative factors. The detection and categorization of multidimensional frailty should be part of the daily practice of emergency physicians. Valid and reliable tools are available to perform a basic and rapid assessment of functional status, mobility, cognition, and medication. In any assessment for falls, cardiac disease, rhythm disorders, orthostatic hypotension, syncope and gait and balance disorders should be ruled out. As a preventive measure to be carried out in the ED, considering that 80% of these patients are discharged home, liaison strategies should be agreed with primary care for the necessary interventions, follow-up, and subsequent control.

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