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Aging increases the risk for falling, and malnutrition enhances that risk. Falls are painful and debilitating, and the costs associated with caring for and rehabilitating patients who fall are significant. Falls may be classified as “frail mechanical falls” and “active mechanical falls.” An active mechanical faller might require only assessment and treatment for fall injuries, while a frail mechanical faller might have underlying issues that caused the fall that require a more complete medical review and treatment.

A group of researchers designed a 1-month cross-sectional prospective study to assess the association between malnutrition and the risk of falls in older people presenting in the emergency room (ER). The research team recruited 126 people 60 years of age or older. Nutritional risk and status of the participants were assessed using the simple-to-use Malnutrition Screening Tool (MST) and the Subjective Global Assessment (SGA) tool. Researchers recorded self-reported falls in the last 6 months and whether a patient was presented at the ER following a fall. They classified participants as frail mechanical fallers, active mechanical fallers, or nonfallers.



Malnutrition prevalence of 15% was documented and was associated with an increased risk of frail mechanical falls and hospital admission.



Below is a summary of some of the research results:

- 28% of participants were presented to the ER as a result of a fall.
 - 12% of falls were classified as frail mechanical.
 - 16% of falls were classified as active mechanical.
- A larger proportion of those patients who presented to the ER following a frail mechanical fall were malnourished (47%) compared to active mechanical fallers (10%) and nonfallers (11%) ($P=0.001$).
- Malnourished participants had an increased risk of self-reported falls over 6 months.
- There was over five times the risk of hospital admission if malnourished than if well-nourished.

Thus, malnutrition was associated with increased risk for falls among these older adult patients—falls of the frail mechanical type that may indicate an underlying medical issue—and increased risk for hospitalization.

Conclusion

Nutrition screening and assessment of patients deemed malnourished may help avoid subsequent falls and may save the patient further suffering and health care costs.

Reference: Vivanti AP et al. Emergency Medicine Australasia. 2009, 21: 386-394.

