

The rising cost of falling

Strategies to combat a common post-stroke foe

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Abstract

Background: As a person ages, falls and strokes each become more likely, and because stroke patients are independently at increased risk for falling, the risk of falls is compounded in this population.

Discussion: There are a number of preventive measures that can be easily implemented to decrease the risk of falling. These are well known to physical and occupational therapists, so a consultation is well-advised. Four areas of focus are: (1) Exercise, to increase strength, balance, and coordination. (2) Vision, to assure that the subject sees as well as possible. (3) Medication, to minimize side effects that could influence falling. (4) Environment, to remove obstacles, add assists, and provide optimal lighting.

Conclusion: Falls among stroke patients are costly in terms of risk to the individual and treatment demands on the health-care system. However, simple attention to details can reduce the risk of falling.

Keywords: falls, stroke, elderly, prevention

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Introduction

Among the mix of potential complications occurring after a stroke is one that is not often given the spotlight: falling. How big is the problem? One-third of the general population aged 65 years and older in the United States fall every year.^{1,2} In this age group, falls are the leading cause of injury related deaths. According to the Center for Disease Control (CDC), falls are also the most common cause of nonfatal injuries and hospital admissions for trauma in this age bracket.³ A recent report of the results from the Auckland Regional Community Stroke (ARCOS) study concluded that falls are common after stroke, and their predictive factors are similar to those for older people in general.⁴ Given the increased life-expectancy of the older adult population plus the anticipated increased incidence of strokes occurring in the U.S., a logical inference would be that the incidence of falls would also rise in the years to come and that stroke patients would incur a disproportionately large number of those falls.

What is the associated economic burden? In 2000, direct medical costs totaled \$179 million for fatal falls and \$19 billion for nonfatal fall injuries.⁵ Examples of costs include those to treat and manage bruises, hip and other fractures, plus traumatic brain injuries. These injuries can make it hard to get

around thereby limiting the level of independent living. Often the result is additional expense incurred with more healthcare intervention at home or moving to a more structured and supervised environment such as a costly assisted living or skilled nursing facility.

Preventive Strategies

Healthcare providers can make a difference in reducing the occurrence of falls. In fact, the ARCOS study advises that fall prevention programs be instituted in stroke services.⁴ The CDC-National Center for Injury Prevention and Control recommends that the healthcare team and patients implement strategies to prevent falls, paying particular attention to the following four areas:⁶

1. Exercise:

Tailored to a patient's ability, exercise is one of the most important ways to lower the chances of falling. Exercise promotes strength and general well-being. Exercises that improve balance and coordination, like Tai Chi or dancing, are especially helpful. A referral to a physical therapist may be appropriate based on the patient's needs.

2. Vision:

Patients should have their vision examined by an eye doctor at least once a year. Wearing the wrong glasses or having a condition like glaucoma or cataracts limits vision, which can increase the risk of falling.

3. Medication:

The MD or pharmacist should review the patient's prescription and over-the-counter medications to identify side effects and potential interactions. As adults age, the way medicines work in the body can change. Some medicines, or combinations of medicines, can make a patient sleepy, dizzy or inattentive, increasing the risk of a fall.

4. Environment:

Making the home environment safer is a key to preventing falls, whether "home" is a private residence, assisted living or skilled nursing facility. The healthcare team may want to consider employing the services of an occupational therapist to provide expertise in home safety measures.

Some examples of environmental steps that can be taken include:

- Removing items that can be tripped over (like papers, books, clothes, and shoes) from stairs and walking pathways.
- Eliminating small throw rugs or using double-sided tape to keep the rugs from slipping.

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- Keeping frequently used items in places that can be easily reached.
- Installing grab bars next to the toilet and in the tub or shower.
- Using non-slip mats in the bathtub and on shower floors.
- Improving the lighting. Brighter lights generally increase ability to see well. Hanging light-weight curtains or shades can help to reduce glare.
- Ensuring handrails and lights are present on all staircases.

Healthcare professionals can help reduce the number of falls post-stroke patients experience by integrating the above strategies into their stroke program. Assessing risk factors, educating patients and their caregivers, and referring patients to appropriate support services can all help to prevent falls and the resulting costs.

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