Article

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Shared Risk Factors for Falls, Incontinence, and Functional Dependence
Unifying the Approach to Geriatric Syndromes

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Abstract

Objective. —To determine whether a set of factors representing impairments in multiple areas could be identified that predisposes to falling, incontinence, and functional dependence.


Setting. —General community.

Participants. —A total of 927 New Haven, Conn, residents, aged 72 years and older who completed the baseline and 1-year interviews.

Main Outcome Measures. —At least one episode of urinary incontinence per week, at least two falls during the follow-up year, and dependence on human help for one or more basic activities of daily living.

Results. —At 1 year, urinary incontinence was reported by 16%, at least two falls by 10%, and functional dependence by 20% of participants. The four independent predisposing factors for the outcomes of incontinence, falling, and functional dependence included slow timed chair stands (lower extremity impairment), decreased arm strength (upper extremity impairment), decreased vision and hearing (sensory impairment), and either a high anxiety or depression score (affective impairment). There was a significant increase in each of incontinence, falling, and functional dependence as the number of these predisposing...
factors increased. For example, the proportion of participants experiencing functional dependence doubled (7% to 14% to 28% to 60%) ($X^2=119.8; P<.001$) as the number of predisposing factors increased from zero to one to two to at least three.

**Conclusions.**—Our findings suggest that predisposition to geriatric syndromes and functional dependence may result when impairments in multiple domains compromise compensatory ability. It may be possible to restore compensatory ability and prevent or delay the onset of several geriatric syndromes and, perhaps, functional dependence by modifying a shared set of predisposing factors. Perhaps it is time to take a more unified approach to the geriatric syndromes and functional dependence. (*JAMA.* 1995;273:1348-1353)
Recurrent Urinary Tract Infections in Adult Women

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