

Gender Differences in Effectiveness of the "Timed Up and Go" (TUG) Test as a Screening Tool for Geriatric Fall Risk Assessment.

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Gender Differences in Effectiveness of the “Timed Up and Go” (TUG) Test as a Screening Tool for Geriatric Fall Risk Assessment

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INTRODUCTION

The Timed-Up-and-Go (TUG) test is recommended as a screening tool to identify elderly patients who may be at increased risk for a mechanical fall. We set out to determine if there were gender differences in the effectiveness of the TUG test.



METHODOLOGY:

This prospective cohort study was conducted at a Level 1 Trauma center in Pennsylvania, USA. After obtained informed consent, subjects were asked to perform the TUG test. This involved having the patient stand up from a chair and walk 10 feet, turn, walk back to the chair and sit down. If the patient took ≥ 12 seconds to complete the test they were considered to have a positive TUG test. Subjects were contacted for phone follow-up and asked to self-report interim falling.

RESULTS:

Data from ninety-two subjects was analyzed. The average age of the participants was 74.8 years old. Fifty-two were female (43.4%). By sixth months after enrollment, 30/92 participants reported having falling. Of the 30 who fell, 12 were men and 18 women. Of the men who fell, 3/9 were TUG positive and 11/18 women who fell were positive. Twenty-nine men denied falling-- 20 were TUG positive and 9 negative. Thirty-three women denied falling -- 18 were TUG positive and 15 negative. For men, the sensitivity of the TUG test was 75% and specificity 31%. A positive TUG test in men had a positive likelihood ratio of 1.087 and a positive predictive value of 31%. For women, the sensitivity of the TUG test was 61% and the specificity 45%. A positive TUG test in women had a positive likelihood ratio of 1.12 and a positive predictive value of 37%.



CONCLUSIONS:

In this small prospective cohort, the TUG test didn't perform well at predicting future falls. However, it was more sensitive and less specific in men than women.

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