

Lower Urinary Tract Symptoms and Falls in Older Men : The 2011 Community Health Survey Data*

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ABSTRACT

Hypothesis/aims: Falls in the elderly occur due to urinary problems such as urinary incontinence, frequent urination, and nocturia, which are major risk factors. Falls in the elderly cause serious health problems such as traumatic brain injury, mobility impairment, and injury-related death and result in a decline in the elderly's quality of life. This study aimed to identify the relationship between the prevalence. of falls and lower urinary tract symptoms in community-dwelling male older adults in Jeju Province and provide basic data to prevent falls through lower urinary tract symptom management.

METHODS

This cross-sectional survey study conducted secondary data analysis using raw data from the 2011 Community Health Survey. The research subjects were based on data from 565 male older adults aged 65 or older in Jeju province who participated in the 2011 Community Health Survey. The variables incorporated in this study encompassed a range of demographics, a history of falls, and lower urinary tract symptoms. SAS (version 9.2 for Windows) program was used. This data is a secondary analysis of public data and has not been reviewed by IRB.

RESULTS

The average age of 565 male subjects was 72.16±5.57 years, with 70.1% aged 65-74, 26.9% aged 75-84, and 3.0% aged 85 or older. Prostatic hyperplasia was diagnosed in 25.4%. The number of older men who experienced falls in the past year was 16.7%, which was reported to be 9.8% once, 2.5% twice, and 2.8% three times. Places in the house where falls occurred: 17.9% in the bathroom/bathtub, 21.4% in the living room/floor, 17.9% on the stairs, and 32.1% in other areas. The average score of lower urinary tract symptoms in men was 7.68±7.90, with the severity being mild at 61.2%, moderate at 30.1%, and severe at 8.7%. The scores for each lower urinary tract symptom, nocturia were 1.80±1.43, weak stream 1.26±1.71, incomplete emptying and frequency 1.06±1.54, intermittency 0.99±1.46 and urgency 0.88±1.45 (Table 1). The lower urinary tract symptoms score of the group that experienced falls was significantly higher than that of the group that did not experience falls (t = 3.57, p = 0.001) (Table 2).

Table 1. Lower Urinary Tract Symptoms of the Male Subjects			
Characteristics	Categories	n (%)	Mean± SD
Severity	Mild	345 (61.2)	7.68±7.90
	Moderate	170 (30.1)	
	Severe	49 (8.7)	
Incomplete emptying			1.06±1.54
Frequency			1.06±1.46
Intermittency			0.99±1.46
Urgency			0.88±1.45
Weak Stream			1.26±1.71
Straining			0.72±1.28
Nocturia			1.80±1.43

Table 2. Lower Urinary Tract Symptoms by Falls					
Characteristics	Categories	n (%)	Lower Urinary Tract Symptoms M±SD	t	p
Falls	Yes	94 (16.7)	10.73±9.35	3.57	0.001
	No	469 (83.3)	7.07±7.44		

CONCLUSIONS

From the results of this study, the lower urinary tract symptom score was significantly higher in the fall group of older males living in Jeju Province, so managing the urination problem well can be a preventive measure to prevent falls. In addition, a study is needed to determine the relationship with the occurrence of falls for each lower urinary tract symptom in the future.

REFERENCES

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