

NATURAL HISTORY OF NOCTURIA AMONG JAPANESE MEN AND WOMEN DURING THE 5-YEAR PERIOD FROM 2003 TO 2007.

Hypothesis / aims of study

At the population level, an increased frequency of nocturnal voiding is one of the most prevalent bothersome urinary symptoms [1]. However, the natural history of nocturia is not well known. We thus evaluated the natural history of nocturia among Japanese men and women in a longitudinal study.

Study design, materials and methods

A longitudinal evaluation of the status of nocturia among Japanese men and women during the 5-year period from 2003 to 2007 was conducted in the Fukui health screening program. Nocturia was defined as two or more voids per night (experienced "sometimes" or "always"). Using a questionnaire, the prevalence, incidence, and remission rate of nocturia were determined annually.

Results

A total of 8,265 individuals (2,532 male and 5,733 female) participated in the health screening every year. Mean age of participants was 66.3 years (range, 24–95 years). Overall prevalences of nocturia each year between 2003 and 2007 were 11.6%, 11.3%, 13.3%, 15.1%, and 13.6%, respectively, and prevalences were higher among males and older age groups (Fig. 1). Figure 2 shows a cluster dendrogram of changes in nocturia. Thirty-two patterns of fluctuation in nocturia were noted, and 71.6% of participants did not experience nocturia during the 5-year period. The annual incidence of nocturia was higher among males and older age groups. The annual remission rate of nocturia was relatively high (36.9–43.5% in males, 40.7–45.9% in females), and was higher in younger age groups (Table).

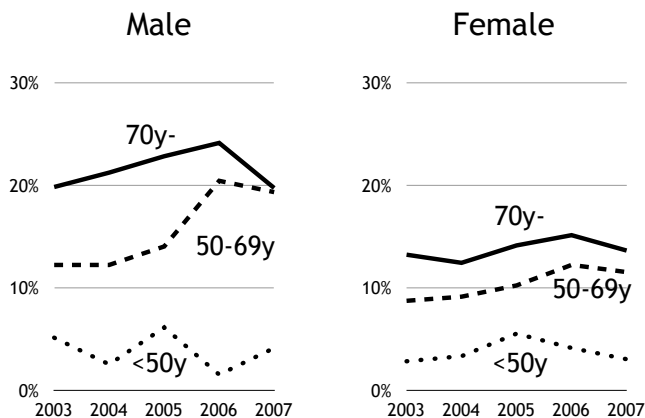


Figure 1. Prevalence of nocturia from 2003 to 2007

Interpretation of results

The present results showed fluctuations in nocturia during the 5-year period. These fluctuations might have been due to the multifactorial etiology of nocturia [2], including aging, lifestyle, obesity, hypertension and diabetes. Further study is therefore needed to determine factors related to the incidence or remission of nocturia.

Concluding message

Although the prevalence of nocturia increased with age, the remission rate was high; therefore, clinicians should consider the natural history when deciding on therapeutic strategies for nocturia.

Table. Incidences and remission rate of nocturia from 2003 to 2007.

Incidence of nocturia									
		Male				Female			
		<50y	50-69y	70y-	ALL	<50y	50-69y	70y-	ALL
Year	2003-2004	1.1%	6.5%	10.4%	7.9%	2.0%	4.5%	7.1%	5.2%
	2004-2005	3.6%	8.1%	11.2%	9.2%	3.3%	5.6%	8.0%	6.3%
	2005-2006	1.1%	14.4%	12.2%	12.1%	2.1%	7.3%	8.9%	7.4%
	2006-2007	3.6%	8.3%	9.2%	8.3%	1.6%	5.7%	6.7%	5.7%

Remission of nocturia									
		Male				Female			
		<50y	50-69y	70y-	ALL	<50y	50-69y	70y-	ALL
Year	2003-2004	70.0%	46.8%	34.6%	39.4%	50.0%	42.2%	52.5%	44.2%
	2004-2005	0.0%	43.7%	34.4%	36.9%	29.4%	44.7%	43.0%	40.7%
	2005-2006	91.7%	42.8%	35.5%	39.3%	60.7%	44.6%	46.8%	43.4%
	2006-2007	66.7%	37.4%	47.3%	43.5%	66.7%	46.7%	47.7%	45.9%

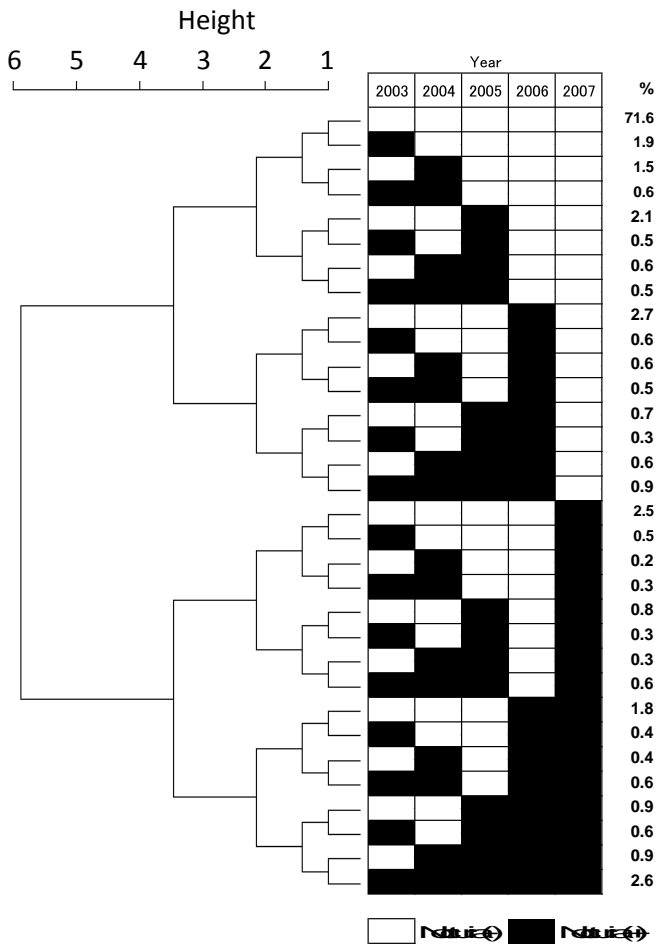


Figure 2. Cluter dendrogram of the changes in nocturia.

References

1. Agarwal A. Eur Urol (2014)
2. Van Doorn B. J Urol (2011)
3. Pesonen J. 24th Annual EAU congress, abst. 594 (2014)

Disclosures

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