

Author: Keyword:

Search

[ADVANCED](#)[TOP](#) > [Available Issues](#) > [Table of Contents](#) > [Abstract](#)

ONLINE ISSN : 1880-313X

PRINT ISSN : 0388-6107

Biomedical Research

Vol. 28 (2007) , No. 2 April pp.101-105

[\[PDF \(296K\)\]](#) [\[References\]](#)**Effects of walking exercise on nocturia in the elderly**Kimio SUGAYA¹⁾, Saori NISHIJIMA¹⁾, Tomoko OWAN²⁾, Masami ODA¹⁾, Minoru MIYAZATO¹⁾ and Yoshihide OGAWA¹⁾

1) Division of Urology, Department of Organ-oriented Medicine, Faculty of Medicine, University of the Ryukyus

2) Department of Adult Nursing, Faculty of Medicine, University of the Ryukyus

(Received December 29, 2006)

(Accepted February 12, 2007)

ABSTRACT

We investigated whether nocturia in the elderly was improved by walking exercise, which involved walking rapidly for 30 min or more in the evening or night for 8 weeks. A questionnaire related to micturition and exercise, blood pressure, body composition analysis, blood biochemistry tests, and urinalysis were performed before and after 8 weeks of exercise to investigate the effects of walking. Thirty men (71 years old on average) continued the walking exercise for long enough to undergo evaluation. The number of episodes of nocturia decreased significantly ($p < 0.001$) from 3.3 ± 0.7 to 1.9 ± 0.8 after 8 weeks of walking exercise. The daytime urinary frequency, blood pressure, body weight, body fat ratio, edema ratio, serum catecholamines, triglycerides, and total cholesterol were also decreased. After 8 weeks of exercise, 20 of the subjects (67%) stated that sleep was deeper than before exercise. Assessment of the overall improvement showed that excellent or good results were obtained in 18 patients (60%). The main factor related to the influence of walking exercise on nocturia was that sleep became deeper, which increased the arousal threshold bladder volume. Walking exercise may also have a preventive effect on lifestyle-related diseases.



[\[PDF \(296K\)\]](#) [\[References\]](#)

Download Meta of Article [\[Help\]](#)

[RIS](#)

[BibTeX](#)

To cite this article:

Kimio SUGAYA, Saori NISHIJIMA, Tomoko OWAN, Masami ODA, Minoru MIYAZATO and Yoshihide OGAWA; "Effects of walking exercise on nocturia in the elderly", *Biomedical Research*, Vol. **28**, pp.101-105 (2007) .

doi:10.2220/biomedres.28.101

JOI JST.JSTAGE/biomedres/28.101

Copyright (c) 2007 Biomedical Research Press



[Japan Science and Technology Information Aggregator, Electronic](#)

