



Editorial

Lower urinary tract symptoms are beyond lower urinary tract



Lower urinary tract symptoms (LUTS) have gained global attention, because of their high prevalence. However, LUTS have been associated with low health care-seeking prevalence. According to Wu et al,¹ the prevalence of healthcare-seeking was only 23.11% in 2000, which gradually increased to 38.37% in 2009, based on a nationwide population-based database. This prevalence rate, however, is still much lower than that in the general population via questionnaire.¹ The low prevalence of healthcare-seeking may underestimate the impact of LUTS on health. Meanwhile, LUTS become more severe with age. Therefore, as the world population is aging, LUTS are becoming a substantial health care burden as the number of aged people who want to maintain a good quality of life increases. Wu et al² further reported that medical attendance for LUTS is associated with increased subsequent risk of outpatient visits and hospitalizations with adjusted incidence rate ratios [95% confidence interval (CI)] of 1.31 (95% CI, 1.29–1.32) and 1.48 (95% CI, 1.40–1.58) as compared with the control group, respectively. Although this is an observational finding, it implies the significant impact of LUTS on the health care issue. The increased risk of more visits and hospitalizations can be explained by a lower quality of life, lower threshold for seeking health care, more concomitant comorbidities, etc. Moreover, there exist other potentially hazardous precursors that predispose the development of major health events.²

Whether LUTS predispose the development of subsequent cardiovascular disease and stroke events remains speculative and unclear. Wu et al² observed an increased subsequent risk of hospitalization for acute cardiovascular events composite outcome in the LUTS group, with an incidence rate ratio of 1.34 (95% CI, 1.13–1.59) (mainly stroke, but not acute coronary syndrome). This is in concordance with the results of Wehrberger et al³ in a longitudinal analysis with 10 years (mean 6.1 years) of follow-up.⁴ There exist several common risk factors for cardiovascular disease in patients with LUTS. LUTS may link to metabolic syndrome, which is multifactorial, involving many interlacing mechanisms including autonomic nervous dysfunction, affective disorders, increased sympathetic activity caused by nocturia-induced sleep disturbances, nondipping pattern of blood pressure changes, or adverse effects of medications for LUTS. Meanwhile, the discrepant effects of LUTS on cardiovascular disease and stroke events can also come from the cognitive and cardiovascular effects of antimuscarinic agents, as can be seen in a higher proportion of preexisting syncope among patients with LUTS. Furthermore, LUTS are also reported to

be associated with higher risks of dementia, 1.43 (1.26–1.61),⁵ as well as increased risks for healthcare-seeking behavior for anxiety and depression, 2.05 (1.92–2.19) and 2.19 (1.97–2.43),⁶ respectively. The studies conducted by Wu et al^{1,2} and Wehrberger et al³ broaden our current understanding of the traditional organ-centric (urethra and bladder) LUTS concept. LUTS are better viewed as overlapping conditions involving multiple organ systems rather than being focused exclusively on the bladder and the urethra.

References

1. Wu MP, Hsu YW, Weng SF, Ho CH, Wang JJ, Tong YC. Healthcare-seeking prevalence of lower urinary tract symptoms among National Health Insurance enrollees in Taiwan, 2000–2009. *Urology*. 2013;81:61–65.
2. Wu MP, Weng SF, Hsu YW, Wang JJ, Kuo HC. Medical attendance for lower urinary tract symptoms is associated with subsequent increased risk of outpatient visits and hospitalizations based on a nationwide population-based database. *Plos One*. 2013;8:e57825.
3. Wehrberger C, Temml C, Gutjahr G, et al. Is there an association between lower urinary tract symptoms and cardiovascular risk in men? A cross sectional and longitudinal analysis. *Urology*. 2011;78:1063–1067.
4. Lin HJ, Weng SF, Yang CM, Wu MP. Risk of hospitalization for acute cardiovascular events among subjects with lower urinary tract symptoms: a nationwide population-based study. *Plos One*. 2013;8:e66661.
5. Chiang CH, Wu MP, Ho CH, et al. Lower urinary tract symptoms are associated with increased risk of dementia among the elderly: a nationwide study. *Biomed Res Int*. 2015. ID 187819.
6. Huang CL, Ho CH, Hsu YW, Wang JJ, Wu MP. The association of healthcare seeking behavior for anxiety and depression among patients with lower urinary tract symptoms: a nationwide population-based study. *Psychiatr Res*. 2015;226:247–251.

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