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DO LOWER URINARY TRACT SYMPTOMS (LUTS) PREDISPOSE THE INDIVIDUALS TO MORE ADMISSIONS IN TAIWANESE WOMEN? – A PRELIMINARY REPORT

Hypothesis / aims of study

Lower urinary tract symptoms (LUTS) are highly prevalent, and increases as age advances [1]. However, the risks of admissions and operations among the women with LUTS have not been well reported. Based on a nationwide population-based database, we tried to describe the risks of admissions and operations among the women with or without LUTS, among Taiwanese women with National Health Insurance.

Study design, materials and methods

Data of this study were obtained from the random population sample of about one million subjects as a representative cohort dated from year 2000 of the National Health Insurance Research Database (NHIRD), which was established by the National Health Research Institute, Taiwan. We identified the women who had at least one out-patient service claim during these years with the coding of storage or voiding symptoms during the recruitment periods 2001- 2004. The comparison group was the women without LUTS, matched for age, gender, hypertension, diabetes. All recruited cases were followed for the next 2 years, excepted the individuals expired during the follow-up period.

Results

Total admission rates (per thousand person-year) were significantly higher in women with LUTS, as compared with the controls, 309.7 vs. 173.6, respectively; with the adjusted incidence rate ratios (IRR) was 1.79, 95% confidence interval (CI) 1.63-1.95. The adjusted IRRs were 1.78 (95%CI 1.56-2.03), 2.02, (95%CI 1.75-2.33), 1.53 (95%CI 1.29-1.81), 2.09 (95%CI 1.13-3.86), 1.40 (95%CI 1.21-1.63), and 4.48 (95%CI 3.37-5.96) in the department of internal medicine, gynecology, surgery, psychiatry, orthopedics and urology; all p-value < 0.05. Meanwhile, the operation rates were also higher in women with LUTS, as compared with controls, in total and department of gynecology, orthopedics, and surgery; all p-value < 0.05.

Interpretation of results

Our study offers an observation that individuals with LUTS had a significant higher admission rate, as compared with controls. The possible explanations were: firstly, there were more co-morbidities among women with LUTS, e.g. LUTS sharing a number of risk factors cardiovascular diseases [2]. Secondly, women with LUTS individuals may at risks for more falling accident due to urgency, and/or Nocturia [3]. Meanwhile, LUTS have poorer quality of life, therefore, they had lower threshold to request an admission. Thirdly, LUTS may predispose the development of some potential medical or surgical conditions.

Concluding message

The preliminary data showed a higher risk of admissions and operations among women with LUTS. The possible explanations were higher possibility of co-morbidities, poorer quality of life, lower threshold of admission, or potential early symptoms of either medical or surgical conditions. This highlights a broad understanding of multiple and overlapping systems in LUTS.

References

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Disclosures

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