

Assessment of Overactive Bladder Symptoms in a Community- Dwelling Population Using the Taiwanese Version of the Overactive Bladder Symptom Score

Chih-Cheng Lu, M.D.

Division of Urology, Department of Surgery, Chi Mei Medical Center, Liouying, Tainan, Taiwan; E-mail: lu@ms6.hinet.net

Overactive bladder (OAB), urge syndrome or urgency-frequency syndrome is a syndrome defined by its chronic symptoms postulated by the International Continence Society (ICS) in 2002 [1]. In Taiwan, less than 30% of women with OAB visit a doctor and most keep the problem to themselves [2]. However, no definite survey of both genders with OAB has been reported in Taiwan. This study reports OAB symptoms in a community-based survey using the Taiwanese version of the overactive bladder symptom score (OABSS).

METHODS

In a local educational organization for the elderly under the auspices of Social Affairs Bureau of Tainan County, a validated Taiwanese translated OABSS was given to attendees (Table 1). The original OABSS, composed of 4 questions, was developed in Japan in 2005 and the English version was published in 2006 [3]. A score of 4 or higher is defined as significant. Any subjects who said they were receiving treatment for a urinary tract infection were excluded. Data on the subjects' general condition, including diabetic or hypertensive ailments, were also surveyed.

RESULTS

This study was performed in September, 2008. Forty-one subjects were visited and 29 sets of data were completed. In the 29 subjects with completed data, there were 9 men and 20 women. The mean age was 60.3 years (range 35 to 74). The mean age was 66.2 years (range 59 to 74) in men and 57.6 years (range 35 to 70) in women. None were reported to have diabetes, however, 9 (31%) of the patients, 2 men (22%), and 7 women (35%), had hypertension. The mean OABSS was 3.0 (range 1 to 6). Thirty-eight percent (11/29) had a significant score of 4 or higher. Of these, 3 (33%) were men and 8 (40%) were women including two with a score of 6. No long- term urologic treatment was reported by attendees. Seven of the subjects with hypertension (78%) had a significant OABSS.

DISCUSSION AND CONCLUSION

OAB is a chronic, symptom-oriented syndrome. A validated questionnaire can offer better communication among physicians, patients and caregivers [4] and better objective evaluation of treatment outcome. Many questionnaires have been developed, such as the Urgency Perception Scale, Patient Perception of Bladder Condition, Primary OAB Symptom Questionnaire, and OAB Questionnaire [3,4].

There are two validated OABSS in the English literature. One was developed by Homma in 2006 and the other by Blaivas in 2007 [5]. The Homma version is much easier to apply because it has fewer questions with a similar power of discrimination [3,4]. Homma reported significant scores ranging from 4 to 15 in patients with OAB. The OABSS differentiates patients with OAB from the healthy population when the score is higher than 3. A high reliability and internal consistency in the Japanese population as well as good correlation with health-related quality of life has been found. The Taiwanese version of the OABSS, which was translated from the Japanese version, is accessible in the

Table 1. Translated Taiwanese OABSS

膀胱過動症症狀問卷 (Overactive Bladder Symptom Score; OABSS)

以下症狀大約的出現頻率為何？請選出一個與最近一週內您的狀態最接近的選項，並在分數的數字上打圈。

問題	症狀	分數	頻率
1	您早上起床後到睡前為止，大約要小便幾次？	0	7 次以下
		1	8 ~ 14 次
		2	15 次以上
2	您晚上就寢後到早上起床為止，大約要醒來小便幾次？	0	0 次
		1	1 次
		2	2 次
		3	3 次以上
3	您多常有突然想小便，此種感覺難以延遲(難以憋住)？	0	無
		1	每週少於 1 次
		2	每週 1 次以上
		3	每天 1 次左右
		4	每天 2 ~ 4 次
4	您多常有因尿急難以延遲(難以憋住)而漏尿？	5	每天 5 次以上
		0	無
		1	每週少於 1 次
		2	每週 1 次以上
		3	每天 1 次左右
		4	每天 2 ~ 4 次
		5	每天 5 次以上
合計分數		分	

Taiwanese Continence Society website (<http://www.tcs.org.tw>).

The present study showed 38% of the community dwelling population had a significant OABSS. This result may reflect the prevalence of OAB in a local region of Taiwan. This area does not lack medical resources. However, none of those with significant scores had sought a doctor's advice. This result may have occurred because there is low awareness of the disease, people are embarrassed to discuss this problem with a care-giver, there is no known treatment [4], or it is regarded as a minor problem [6]. Another reason might be the modest score (6 being the highest score) on the OABSS in this study.

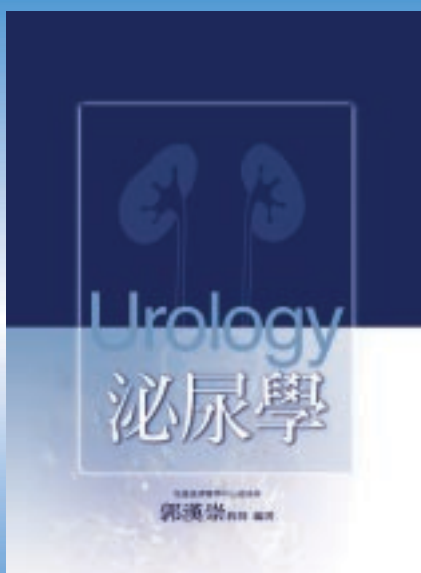
In 2006, an OAB related survey was done in Matsu, Lienkiang County, Taiwan by Yu et al [6]. They found that the prevalence of OAB in adults in that rural area was around 17%. The different percentages of OAB on these two studies may be attributed to the different population groups and methods of defining OAB. Our study defined significant OAB based on the OABSS, and that in Yu's study was based on a symptom score similar to the American Urological Association Symptoms Index.

The results of this brief study showed that both genders could be affected by OAB. Women did have a significantly higher rate of significant OAB, which was similar to other studies using different methods of defining OAB [3,5,6]. Although no diabetes was reported in subjects with significant OABSS in this study, diabetes has been documented as a risk factor for OAB [6,7]. Hypertension, on the other hand, was closely related with significant OABSS in this study. The correlation between OAB and hypertension deserves further study.

In conclusion, OAB affects both genders in Taiwan, and the Taiwanese version of OABSS is a feasible tool to survey for OAB. Women have a significantly higher OABSS. The limitations of this study were the small sample size and selection bias. A further larger scale study is needed to confirm these preliminary findings.

REFERENCES

1. Abrams P, Cardozo L, Fall M, et al: The standardization of terminology of lower urinary tract function: Report from the Standardisation Sub-committee of the International Continence Society. *Neurourol Urodyn* 2002; **21**:167-178.
2. Chen GD, Lin TL, Hu SW, Chen YC, Lin LY: Prevalence and correlation of urinary incontinence and overactive bladder in Taiwanese women. *Neurourol Urodyn* 2003; **22**:109-117.
3. Homma Y, Yoshida M, Seki N, et al: Symptom assessment tool for overactive bladder syndrome-overactive bladder symptom score. *Urology* 2006; **68**:318-323.
4. Chen GD, Ng SC: Questionnaire survey on overactive bladder. *Incont Pelvic Floor Dysfunct* 2008; **2**:103-105.
5. Blaivas JG, Panagopoulos G, Weiss JP, Somaroo C: Validation of the overactive bladder symptom score. *J Urol* 2007; **178**:543-547.
6. Yu HJ, Liu CY, Lee KL, Lee WC, Chen TH: Overactive bladder syndrome among community-dwelling adults in Taiwan: Prevalence, correlates, perception, and treatment seeking. *Urol Int* 2006; **77**:327-333.
7. Yamaguchi C, Sakakibara R, Uchiyama T, et al: Overactive bladder in diabetes: A peripheral or central mechanism? *Neurourol Urodyn* 2007; **26**:807-813.



編著者：郭漢崇

花蓮慈濟醫學中心泌尿科團隊在 1988 年起，由當時任職台大醫院泌尿科郭漢崇醫師擔任主任，近二十年來陸續邀集國內泌尿科具專長之醫師，共同打造一個兼診斷、治療與研究能力的泌尿科團隊。《泌尿學》便是由花蓮慈濟醫學中心泌尿科團隊，全體通力合作所完成的醫療鉅著。相信不只對於泌尿科醫師、醫學生，甚至對於護理人員，都深具參考價值。

訂購請洽：慈濟大學出版組

TEL: 038565301 轉 7059

(為優惠醫護學生，凡訂購此書可享八折優惠)