

Editorial Comment — Diagnosis of OAB

Yat-Ching Tong, M.D.

Department of Urology, College of Medicine, National Cheng Kung University Hospital, Tainan, Taiwan

INTRODUCTION

The Pfizer Young Generation OAB Symposium was held in Taipei on January 13th, 2008. The meeting was particularly meaningful since a new generation of Taiwanese physicians were able to share their views on the current issues and controversies concerning OAB. Five distinguished urologists, Drs. Chun-Hsien Wu, Chung-Hsin Yeh, Hong-Lin Cheng, Chung-Cheng Wang and Tai-Lung Cha, were given the task of telling us how to make the diagnosis of OAB.

HOW TO DIAGNOSE OAB?

In order to make a correct diagnosis, we must first have a correct definition of the disease. The concept of OAB is relatively new. It was first recommended for clinical use during the Overactive Bladder and Its Treatments Consensus Conference held in July, 1999 in London. The rationale for adopting this label was that it was easy for patients to understand. In its original form, OAB was defined as a medical condition referring to the symptoms of frequency and urgency, with or without urge incontinence, appearing in the absence of local pathologic or metabolic factors that would account for these symptoms. Incontinence is not a necessary condition for diagnosis because roughly half of people with overactive bladder do not have incontinence. Nevertheless, there is a profound impairment in their quality of life due to urge and frequency symptoms [1]. In 2002, the International Continence Society proposed a revised definition for OAB as follows: urgency, with or without urge incontinence, usually with frequency and nocturia, can be described as overactive bladder syndrome, urge syndrome or urgency syndrome [2]. The discrepancy between these two definitions has caused some confusion in the literature. In his review, Dr. Wu clarified the meaning of the term OAB and suggested that OAB is a useful yet tentative diagnosis before the underlying pathology is uncovered. On the other hand, OAB *per se* is a definitive diagnosis if no related pathologic conditions can be found.

OAB is a symptom-syndrome. Since the whole concept of OAB is symptom-based, various conditions with different pathological processes may be included. Clinically, OAB is closely related to detrusor

overactivity (DO). DO is an urodynamic observation and has generally been regarded as a motor phenomenon. However, recent evidence has suggested that the pathogenesis of both OAB and DO are related to bladder sensory disturbances. Dr. Yeh's detailed review on this subject demonstrated the intriguing relationships between these three entities.

As the diagnosis of OAB is based on symptoms, many patients can be spared unnecessary invasive procedures. On the other hand, such a diagnostic approach would mandate thorough basic investigations including a good history and effective screening instruments. Since urgency has become the cornerstone in the diagnosis of OAB, obtaining a measurable value for this subjective symptom is an important issue. Various quantitative assessment methods for urinary urgency were introduced in Dr. Cheng's article, including the Urgency Perception Scale, Indevus Urgency Severity Scale, Warning Time and Urge Keypad Test. A voiding diary is indispensable in documenting the nature and severity of lower urinary tract symptoms (LUTS) and it is important in diagnosing OAB. However, data obtained in the diary are frequently underutilized and misinterpreted. Dr. Wang reported that the urinary diary is helpful in the diagnostic evaluation of LUTS, and the follow-up of treatment outcomes, and in providing a simple form of bladder retraining.

The development of useful OAB biomarkers in the future can aid in effective OAB screening and early diagnosis. Recent evidence has revealed some promising candidates which include urine NGF and PGE2, as well as the c-kit tyrosine kinase pathway. Certainly, we hope that the diagnostic procedures for OAB patients can be an easy and comfortable experience just as what I wrote many years ago [3].

REFERENCES

1. Abram PA, Wein AJ: Introduction: Overactive bladder and its treatments. *Urology* 2000; **55(Suppl 5A)**:1-2.
2. Abrams P, Cardozo L, Fall M, et al: The standardization of terminology of lower urinary tract function: Report from the standardization sub-committee of the International Continence Society. *Neurourol Urodyn* 2002; **21**:167-178.
3. Tong YC: OAB - the apocalypse. *Neurourol Urodyn* 2003; **22**:89.

Received: March 17, 2008 Accepted: March 19, 2008
 Address correspondence to: Dr. Yat-Ching Tong, Department of Urology, National Cheng Kung University Hospital, 138, Sheng-Li Road, Tainan, 70403, Taiwan
 E-mail: yctong@mail.ncku.edu.tw