Commitment of Taiwanese Continence Society on the Clinical Practice Guidelines for Overactive Bladder

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INTRODUCTION

The term overactive bladder (OAB) was 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 is easy for patients to understand. In its original form, the definition of OAB was a medical condition referring to the symptoms of frequency and urgency, with or without urge incontinence, when 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 the 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: Urgency, with or without urge incontinence, usually with frequency and nocturia, can be described as overactive bladder syndrome, urge syndrome or urgency syndrome [2]. Diagnosis-wise, OAB is a symptom-based syndrome and can spare many patients going through unnecessary invasive procedures. On the other hand, since the diagnosis of OAB is based on symptoms, various conditions with different pathological processes may be included. The prevalence of OAB is high and estimated to be about 17% in Western populations [3]. In Taiwan, Yu et al [4] investigated the OAB prevalence among community adults in Matsu. Participants (n=1,827) completed a questionnaire on OAB, which was defined as urgency with either frequency or nocturia. The age-adjusted prevalence of OAB was 16.9%. Age, diabetes, and benign prostatic hyperplasia in men, whereas diabetes, hyperlipidemia, stress incontinence, and recurrent lower urinary tract infections in women were factors independently associated with OAB. As population aging and factors of metabolic syndrome become more prominent in Taiwan, the clinical burden of OAB is expected to rise in the years to come.

Current Treatment Modalities for OAB

Currently, treatment modalities for OAB include: (1) life style interventions; (2) physical therapies; (3) bladder retraining; (4) pharmacological therapies; and (5) surgical treatments.

1. Life style interventions: reduction in body weight, quitting cigarette smoking, moderate fluid intake, and reduction in caffeine consumption.
2. Physical therapies: pelvic floor muscle training, field electric stimulation, and neuromodulation.
3. Bladder retraining: patient education, scheduled voiding, urgency control strategies, self-monitoring, and positive reinforcement.
4. Pharmacological therapies: antimuscarinic drugs, calcium channel blockers, potassium channel openers, mixed action bladder relaxants, alpha-blockers, beta-agonists, prostaglandin synthesis inhibitors, antidepressants, vasopressin analogues, intravesical capsaicin and resiniferatoxin instillation, and intravesical botulinum toxin injection.
5. Surgical treatments: bladder denervation, and bladder augmentation.

Initiatives for Taiwanese Continence Society (TCS) Clinical Practice Guidelines for OAB

The clinical and economic burdens associated with OAB are heavy. Hu et al reported that the total cost of OAB in the United States was 12.6 billion dollars in the year 2000 [5]. On the other hand, the rapid developments of equipment and techniques for OAB have increased urologists' choices in diagnosis and treatment. Increasing demand, increasing options, but limited health resources means that health care delivery must be effective, economical and evidence-based.

Clinical guidelines are aimed to rationalize the diagnosis, treatment and follow-up of a particular disease [6]. The Taiwanese Continence Society (TCS) is launching a 3-year project of establishing clinical practice guidelines for five entities of lower urinary tract dysfunction (LUTD): LUTS/BPH, overactive bladder (OAB), stress urinary incontinence/pelvic floor prolapse (SUI/POP), interstitial cystitis (IC) and geriatric incontinence (GI). It is our belief and hope that the guidelines will be useful roadmaps for healthcare practitioners and providers when dealing with patients of LUTD.

KEY ELEMENTS IN THE MAKING OF CLINICAL PRACTICE GUIDELINES

Evidence-based medicine

Evidence-based medicine (EBM) is the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients [7]. Originally, clinical evidence was sought using meta-analysis of published, randomized, controlled trials and was a research method in its own rights. Gradually, the meta-analysis has evolved into a systemic review including not only published data from randomized controlled trials but also data from unpublished sources such as correspondence with principal investigators, conference proceedings and abstracts. Obtaining and critically appraising the evidence in the context of each individual's circumstances, is beyond the time frame, skills, and resources of most clinicians. To overcome these limitations, clinical practice guidelines have been developed with the aim of providing an evidence-based framework on which clinicians base their practices. Thus clinical practice guidelines are

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systemically developed statements designed to assist practitioners' and patients' decisions about appropriate health care for specific clinical conditions and/or circumstances. The purpose of practice guidelines is to reduce unwanted variations by setting agreed standards based on the best available evidence.

Expert opinions

A clinical guideline can only be as good as the evidence upon which its recommendations are made. However, the selection, utilization and organization of evidence are in the hands of experts. One of the greatest challenges in developing clinical practice guidelines is the availability of evidence. Clinical recommendations based on randomized controlled trials are relatively straightforward. However when no convincing evidence exists, recommendations have to be based on expert opinion and consensus. The choice of guideline experts should emphasize multidisciplinary representations from the various related expertise including urology, neurourology, family medicine and nursing. According to the National Health Service (NHS) of the United Kingdom, the criteria for good clinical guidelines should include [8]: validity, reproducibility, multidisciplinary representation, clinical applicability, cost-efficacy, flexibility, clearness, reviewability and amenability to clinical audit.

All members of the healthcare community

It is obvious that guidelines are not something just meant to be developed. Guidelines are to be disseminated, utilized and validated. Developing and publishing guidelines does not automatically initiate practice changes [9]. Prospective studies are necessary to help shape and maintain the most cost-effective, user-friendly and patient-focused clinical pathway for OAB. Thus, active feedback and involvement of all members of the healthcare community is necessary for successful outcomes of the TCS guideline project.

THE TCS GUIDELINE ACTION PLAN

The essential steps in the development of a guideline include [10]:

- Setting the objectives
- Defining the issues and controversies
- Systemic search, extraction, rating and analysis of the evidence
- Cost analysis
- Drafting the recommendations
- Guideline piloting
- Monitoring feedback and draft revision
- Guideline dissemination and implementation

Under the TCS Guideline Committee, five *ad hoc* sub-committees (LUTS/BPH, OAB, SUI/POP, IC and GI) have already been set up. Dr. Shing-Hwa Lu is in charge of the OAB sub-committee. Expert meetings will be held by inviting nationally and internationally acclaimed scholars, physicians, scientists and medical personnel to participate in the discussion of clinical evidence, current controversies and recent developments in OAB. The meetings will be held in different parts of Taiwan with the purpose of including opinions from all regions of the country. The plan aims to complete the first draft of diagnostic guidelines during the first year and treatment guidelines during the second year. By the end of second year, a preliminary report for the OAB guidelines will be published for health professionals. During the third year, pilot clinical testing will be performed. Feedback responses towards the preliminary recommendations will be gathered and evaluated, after which the guidelines will be amended and updated with any upcoming new evidence. The final report of the recommendations will be released at the end the third year.

CONCLUSION

Taiwan is a rapidly aging society so the clinical and economical burden in the treatment of patients with OAB is enormous. A roadmap for cost-efficient healthcare delivery to these patients has become a necessity. TCS aims to develop diagnostic and treatment guidelines that are effective, economical and evidence-based. However, we believe that implementation and utilization of the recommendations is not just an organizational responsibility of TCS alone, but rather individual responsibility of every person involved in the healthcare system.

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