

Evaluation the Short-term Outcome on a Structured Bladder Training Program for Idiopathic Overactive Bladder Syndrome

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Introduction

Idiopathic Overactivity Bladder (iOAB) is defined as OAB without underlying urological or neurologic diseases. iOAB is a common and distressing health problem among patients. It has major impact on patient's psychological well-being and quality of life. According to the International Consultation on Incontinence (ICI) guidelines, it recommended behavioural therapy and pharmacotherapy as first-line treatment. Behavioural therapies are in terms of diet modification, pelvic floor muscle exercise, biofeedback and bladder training. Certain behaviours—limiting fluids, for example—can be counter-productive but are sometimes employed by women in an attempt to prevent leaking urine or the need to void while away from home (1). Bladder training (BT) has been proven to improve urge urinary incontinence, resolution rates have been reported to range from 12% to 73%, and improvement rates from 57% to 87% (2). The aim of this study is to assess effectiveness of our Structured bladder training program for iOAB in the female urology clinic.



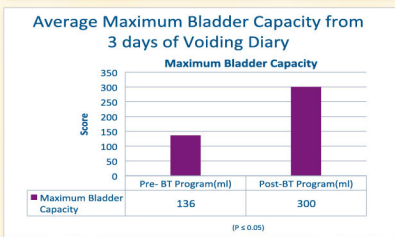
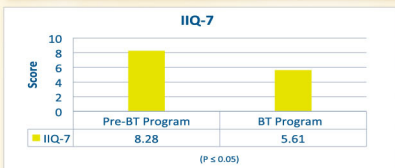
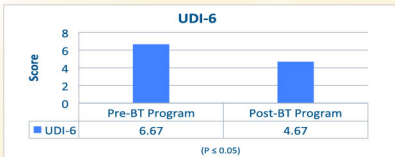
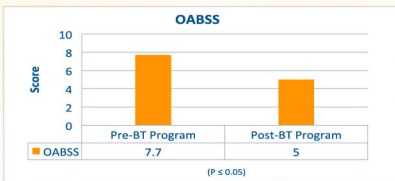
Methods

Our structured BT program consists of (1) education of normal daytime voiding frequency and amount, (2) explanation of normal physiology of storing and emptying function of bladder, (3) patient are taught to hold urine until a certain goal, and aim to increase the amount by 50 mL every 4 weeks. All patients were instructed to keep to the schedule regardless of urgency and to use strategies to control urgency if this occurs before the scheduled voiding time. Ideally, the voiding interval should be increased by 15–30 min each week according to the patient's tolerance to the schedule, until a voiding interval of at least 3–4 hours is achieved. Also, based on the three frequency-volume charts obtained at baseline, the longest voiding interval achieved several times was deemed the initial voiding interval. (4) Refrain from voiding immediately after first sense of urge, to use distraction methods in order to decrease the desire of voiding and immediately start pelvic floor exercises during that urge episode and (5) report any problems to a urology nurse. All patients were instructed not to alter fluid intake during the study period in order to test the efficacy of the training protocols.

We retrospectively reviewed all patients who attended our Female Urology Clinic with OAB symptoms from March 2017 to December 2017. We excluded patients with previous history of genito-urinary surgery, pelvic radiation therapy and neurologic conditions such as cerebrovascular accidents, Parkinson's disease, and spinal cord injuries. We obtained our outcomes with questionnaires UDI-6, IIQ7, OABSS and three days voiding diary before and 3 months after.

Results

There were 67 patients recruited during the study period. The average age of the patients was 66 years old. After 3 months of BT, the OABSS decrease from 7.7 to 5 ($P \leq 0.05$). Although incontinence episode did not show significant improvement. The result of all domains in UDI-6 questionnaires also showed significant improved from 6.67 to 4.67 ($P \leq 0.05$). The result of the IIQ7 questionnaires were analysed. The scale showed decrease from 8.28 to 5.61 ($P \leq 0.05$). Patients replied that improvement of their quality of life in daily activities. Their bladder capacity increased from 136 to 300 ml ($P \leq 0.05$) after the structured BT program as evident in their voiding diaries.



Conclusion

This Structured BT program is promising as it improves bladder control in a significant improvement. It is effective in improving quality of life (QoL), voiding symptoms, and is perceived to be useful in improving symptoms. This multicomponent behavioral training is a new response to urgency based on the use of pelvic floor muscle contraction as a critical component to suppress urgency, control incontinence and restore a normal voiding interval. However, the structured BT program which educate and empower patients can be utilized either alone or as an adjunct therapy to enhance pharmacotherapy for OAB and UII. In order to obtain more information, more detailed studies are necessary in the future.

References

1. Elstad EA, et al. Fluid manipulation among individuals with lower urinary tract symptoms: a mixed methods study. J Clin Nurs 2011;20(1-2):156-65.
2. Van Kerrebroeck PE. Does conservative management really benefit patients with OAB? Curr Urol Rep 2012;13:348-55.