#811 The Effect of Bladder Training and Pelvic Floor Muscle Training after Botulinum Toxin-A on Urinary Symptoms and Quality of Life in Patients with Overactive Bladder Syndrome: Preliminary Findings of a Clinical Study

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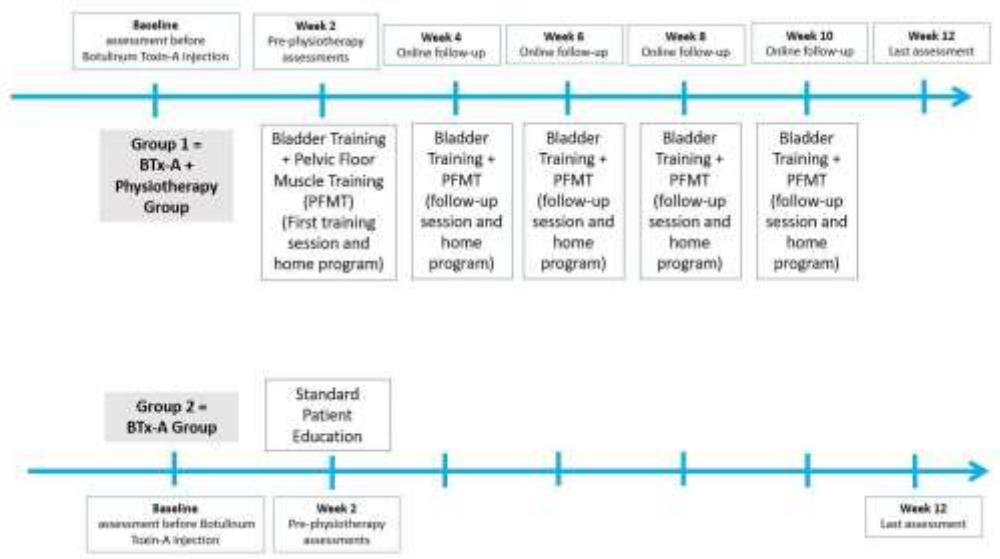
Hypothesis / aims of study

Overactive bladder (OAB) syndrome is a common condition that significantly affects the quality of life of patients. Epidemiological studies have reported a prevalence of OAB ranging between 12% and 17%, with its incidence increasing with age (1). According to the International Continence Society, OAB syndrome is defined as 'a symptom characterized by increased daytime frequency and/or nocturia, with or without urinary incontinence (OAB-wet vs. OAB-dry) in the absence of urinary tract infection or other detectable diseases' (2).
While there are numerous studies in the literature investigating the effects of BTx-A in patients with OAB syndrome, none have explored the additional effects of "bladder training" and "pelvic floor muscle training" on urinary symptoms and quality of life immediately after BTx-A injection in these patients. **Therefore, the aim of the present study was to investigate the effects of "bladder training" and "pelvic floor exercise training" on urinary symptoms and quality of life in patients with OAB syndrome following bladder wall injection of BTx-A.**

Study design, materials and methods

A total of 25 female patients with ***non-neurogenic*** and ***wet OAB*** who underwent BTx-A injection were included in the non-randomized clinical study. Patients were non-randomly assigned to two study groups: "group 1 = BTx-A + physiotherapy (n=15) (age: 57.13±17.79 years, BMI: 28.98±4.66 kg/m2)" or "group 2 = BTx-A" (n=10) (age: 59.30±11.28 years, BMI: 28.71±5.07 kg/m2)".
The severity of urinary symptoms, severity of urinary incontinence, quality of life, and subjective perception of improvement were evaluated using the International Consultation on Incontinence Questionnaire – Female Lower Urinary Tract symptoms (ICIQ-FLUTS), one-hour pad test, International Consultation on Incontinence Questionnaire – Lower Urinary Tract symptoms Quality of Life Module (ICIQ-LUTSqol), and the Global Improvement Perception Scale, respectively. All measurements except subjective perception of improvement were conducted at baseline, 2 weeks after the injection of BTx-A (i.e., before the application of bladder training and pelvic floor muscle training), and at 12 weeks post-injection.



Results and interpretation

Table 1. Within-group changes and between-group differences in outcome measures

	Time points	BTx-A + Physiotherapy (n=15)	BTx-A (n=10)	p†
Severity of urinary symptoms				
ICIQ-FLUTS	Baseline	20,20±10,36	19,0±5,14	0,739
	Week 2	17,80±12,23	12,0±5,44	0,344
	Week 12	9,60±7,30	10,0±4,40	0,452
	p‡	**<0,001***	**<0,001***	
Severity of urinary incontinence				
One-hour Pad test (g)	Baseline	9,60±18,61	12,40±17,46	0,386
	Week 2	9,00±20,85	9,80±15,12	0,460
	Week 12	2,53±3,00	8,70±14,66	**0,015***
	p‡	**<0,001***	**0,001***	
Quality of life				
ICIQ-LUTSqol	Baseline	54,93±11,00	54,60±8,66	0,597
	Week 2	49,40±16,33	38,50±15,11	0,102
	Week 12	36,93±11,77	37,60±12,05	0,828
	p‡	**<0,001***	**0,001***	

The data are presented as mean ± standard deviation. n: number
ICIQ-FLUTS: International Consultation on Incontinence Questionnaire – Female Lower Urinary Tract symptoms
ICIQ-LUTSqol: International Consultation on Incontinence Questionnaire – Lower Urinary Tract symptoms Quality of Life Module
p‡: Statistical significance level of change within-group over time
p†: Statistical significance level of between-group comparisons

Table 2. Comparison of the subjective perception of improvement between groups

Subjective Perception of Improvement	BTx-A + Physiotherapy (n=15)	BTx-A (n=10)	p
Much better	9 (60%)	2 (20%)	0,052
Better	3 (20%)	3 (30%)	
No change	3 (20%)	5 (50%)	

The data are presented as number (percentage). n: number, p: Chi-square test

Conclusions

Through collecting pilot data, our aim was to determine whether the reduction in detrusor hyperactivity following BTx-A injection might facilitate successful implementation of bladder training and pelvic floor muscle training. Thus, combined therapy (bladder training and pelvic floor muscle training + BTx-A) would have offered greater benefits in alleviating symptoms and improving quality of life. However, our findings indicated that bladder training and pelvic floor muscle training following intravesical injection of BTx-A showed similar effectiveness with BTx-A alone in terms of the improvements in symptoms and quality of life in the short-term.

References

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