

OUTCOMES OF CLASSIFICATION-BASED OUTPATIENT PHYSIOTHERAPY TREATMENT FOR FEMALE URINARY INCONTINENCE IN WOMEN 65 AND OLDER

Hypothesis / aims of study

Conservative rehabilitation based interventions for urinary incontinence (UI) are recommended as first line treatment by physician clinical practice guidelines in the United States (1). Physiotherapists in outpatient clinical practice in the United States provide evidence-based interventions for UI based on the classification or type of UI. Outcomes of treatment of patients with UI in outpatient physiotherapy (PT) settings have not been extensively reported, in part due to limited clinical use of standardized, objective instruments to measure symptom severity and quality of life in this patient population. The aim of this study is to report the outcomes of intervention for female patients over the age of 65 who underwent classification-based PT treatment for UI in outpatient settings in the United States.

Study design, materials and methods

Participants were women 65 years and older with lower urinary tract dysfunction who were referred to outpatient PT and answered "YES" to this screening question at intake: "During the last 3 months, have you leaked urine (even a little bit)?" At initial evaluation, they completed 3 instruments: 3 Incontinence Questions (3IQ), Incontinence Impact Questionnaire (IIQ-7), and the International Consultation on Incontinence Modular Questionnaire (ICIQ-UI). Baseline demographic, clinical, and quality of life data were collected. The patient's answer for the 3rd question on the 3IQ provided the initial classification of the type of UI : stress, urge, or mixed, or insensible UI (2). If the answer to question 3 on the 3IQ was insensible UI, then the woman was asked to complete a voiding log after the initial physiotherapy evaluation. The physiotherapist analyzed the voiding log to best further classify the type of UI as mixed, urgency, or stress UI in order to provide classification-based treatment. Patients underwent individualized PT treatment determined by the evaluating physiotherapist, based on the type of UI (1): stress UI, urgency UI (3), or mixed UI. Incontinence symptoms and impact of quality of life using the IIQ-7 and ICIQ-UI were analyzed. Clinicians were asked to administer the instruments again during the course of care, and/or after treatment.

Results

One hundred and ten women were included in this sample of convenience collected from 17 outpatient rehabilitation clinics in north-central Florida from 2010 to 2013. The age of the women ranged 65 years to 93 years, mean age was 73.4 years (sd= 6.3, range 65-93). Mean length of treatment was 60 days (sd= 43 days, range 8 - 351). Mean number of treatments was 7 (sd= 5, range 1-19). Self-reported classification of UI from the 3IQ, question number 3, were urgency UI: 58 (53%), insensible UI: 32 (29%), mixed UI: 13 (12%) and stress UI: 7 (6%). Clinicians collected a second set of instruments (S2) from 62 women, and a third set from 24 women (S3). Significant changes in IIQ-7 (p=0.03) and ICIQ-UI (p= 0.01) scores over time indicated significant reductions in symptom severity and UI- related quality of life. Specifically, IIQ-7 scores decreased significantly from baseline to S3 (p= 0.03) and from S1 to S2 (p=0.03), but not from S2 to S3 (p=0.72). Additionally, ICIQ-UI scores decreased significantly from baseline to S3 (p=0.01), but not from baseline to S2 (p=0.09) or from S2 to S3 (p=0.087).

Interpretation of results

Classification based outpatient physiotherapy treatment for UI has the potential to significantly improve symptom severity and quality of life in women 65 and older with different types of UI. The largest proportion of women in this study self classified their symptoms as urgency UI (53%) using the 3IQ. Almost one third of women were not initially aware of circumstances surrounding their urine leakage (insensible UI) (2).

Concluding message

Evidence based physiotherapy interventions based on the type of UI resulted in significant improvements in symptom and quality of life scores for this heterogeneous sample of women over the age of 65 with UI in the United States. These data support the use of classification based physiotherapy interventions for treatment of different types of UI, despite a large proportion of patients being unaware of the circumstances surrounding their UI.

References

1. Qaseem A, Dallas P, Forcica M, Starkey M, Denberg T, Shekelle P. Nonsurgical management of urinary incontinence in women: a clinical practice guideline from the American College of Physicians. *Annals Of Internal Medicine* September 16, 2014;161(6):429-440.
2. Brucker B, Fong E, Kaefer D, Shah S, Rosenblum N, Nitti V. Urodynamic findings in women with insensible incontinence. *International Journal Of Urology*. April 2013;20(4):429-433.
3. Burgio KL, Kraus SR, Menefee S, Borello-France D, Corton M, Johnson HW, et al. Behavioral therapy to enable women with urge incontinence to discontinue drug treatment: a randomized trial. *Ann Intern Med* 2008;149(3):161–9

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