

DESIGN AND VALIDATION OF MARMARA POST-PROSTATECTOMY INCONTINENCE SYMPTOM SCORE (M-PPISS)

Hypothesis / aims of study

Although there are many questionnaires for the assessment of incontinence, there is no questionnaire specific for the evaluation of post-prostatectomy incontinence (PPI) following radical prostatectomies (RP). This study, aims to validate the "Marmara Post-Prostatectomy Incontinence Symptom Score (M-PPISS)", designed for the assessment of PPI.

Study design, materials and methods

The questionnaire consists of 3 parts including 8 questions and an analogue scale to assess the impact of PPI on the quality of life: 4 questions examining the type and degree of PPI, 3 questions examining the effect of PPI on quality of life (QoL) and 1 question examining bladder emptying (Table 1). Total score for the questionnaire varies between 0 and 28. The questionnaire was completed by 106 patients at one week, and 3-month intervals up to one year after RP between 2005 and 2012.

Results

The mean score of 106 patients at week 1 after the operation was 6,57 (min:0 max: 24). The mean score of 104 patients participating in ongoing follow-ups at week 1 after operation was determined as 5,44. The mean score of 91 patients with an ongoing follow-up decreased to 2,89 at the end of twelve months. No significant differences were observed between the total score and the averages among the patients' responses to each of the questions following test-retest analyses performed by comparing the scores of week 1 and month 1 ($p < 0,05$). The internal consistency coefficient measured for our questionnaire was found to be higher (Cronbach's alpha: 0,887). When an item was deleted Cronbach's alpha was not lower than 0,85 for any value. The correlation of the total score with the analogue scale is examined at Table 2. According to 27% rule, p value was calculated as 0,0001. In the numerical evaluation of total score and the analogue scale considering QoL (satisfaction and dissatisfaction); patients with a total score of 0-4 were accepted as 'satisfied with QoL', while patients with a total score of ≥ 5 were included in the dissatisfied group (cut-off value: 5).

Concluding message

M-PPISS was found to be a reliable and valid instrument in the evaluation of urinary incontinence after RP.

Table 1: M-PPISS questionnaire form

1. How many pads do you change daily?				
None (0)	(1)	(2)	(3)	4 or more

2. What size pad do you use?	
(0)	I don't use any pads
(1)	Small-sized pad(s) (measuring the size of one's palm)
(2)	Children's diaper(s)
(3)	Adult diaper(s)
(4)	I use condom catheters

3. How wet is your pad when you change it?	
(0)	It doesn't get wet at all
(1)	It is slightly damp
(2)	Less than half of the pad is wet
(3)	More than half of the pad is wet
(4)	It is soaking wet when I change it

4. When do you experience incontinence?	
(0)	Never
(1)	When I get up and when I am walking
(2)	When laughing, straining and coughing
(3)	With the slightest movement
(4)	Always

5. To what degree does your incontinence affect your daily activities?	
(0)	It doesn't impact my daily activities; I am able to function normally
(1)	It has a small impact; I am able to carry out most of my daily activities
(2)	It moderately impacts my daily activities; I am only able to perform some of them
(3)	It has a serious impact; I am unable to carry out most of my daily activities

6. To what degree does your urinary incontinence affect your relationships with friends?

- (0) It has no impact on my relationships; my friendships remain unaffected
- (1) It has a very minor impact on my relationships
- (2) It moderately affects my relationships
- (3) It has a serious negative impact on my relationships

7. Does your urinary incontinence affect your state of mind or psychological health?

- (0) It has no impact
- (1) It has a very minor impact; I feel irritated and somewhat tense
- (2) It moderately affects my state of mind; I feel tense and stressed
- (3) It feel severely irritated and tense

8. What is your urination pattern like?

- (0) I am able to urinate comfortably
- (1) I experience difficulty urinating
- (2) I experience great difficulty urinating
- (3) I am unable to urinate

Total score: _____

If you continue urinating in the same manner during this next period of your life how will you feel?	Very happy	Pleased	Alright	Sometimes happy and other times unhappy	Mostly unhappy	Unhappy	Horrible
	0	1	2	3	4	5	6

Table 2: The correlation of the M-PPISS score with the analogue scale

correlation coefficient	r value	p value
Week 1	0,72	p: 0.0001
Month 1	0,82	p: 0.0001
Month 3	0,704	p: 0.0001
Month 6	0,87	p: 0.0001
Month 9	0,79	p: 0.0001
Month 12	0,78	p: 0.0001

Disclosures

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