

HOW TO MEASURE THE SEVERITY OF FEMALE INCONTINENCE. A SIMPLE PAD TEST GRADING SYSTEM WHICH PREDICTS LIKELY OUTCOME OF CONSERVATIVE TREATMENTS.

Hypothesis / aims of study

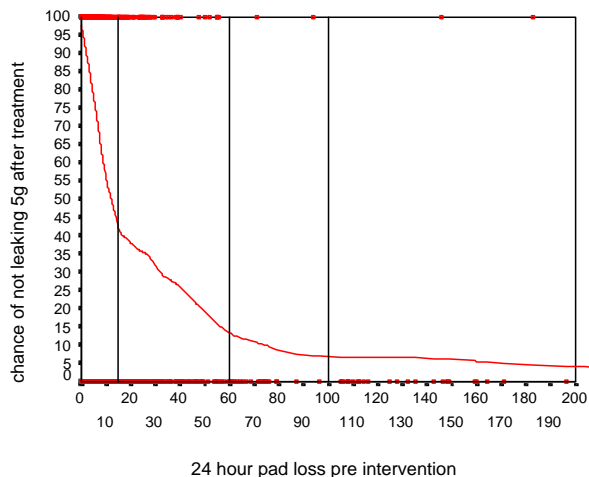
Currently there is no grading system that measures severity of incontinence and is prognostic for treatment outcome. We have explored two commonly used methods of assessing the severity of incontinence and assessed which method is most prognostic for primary treatment outcome. A grading system has been developed that can be used in clinical practice and research.

Study design, materials and methods

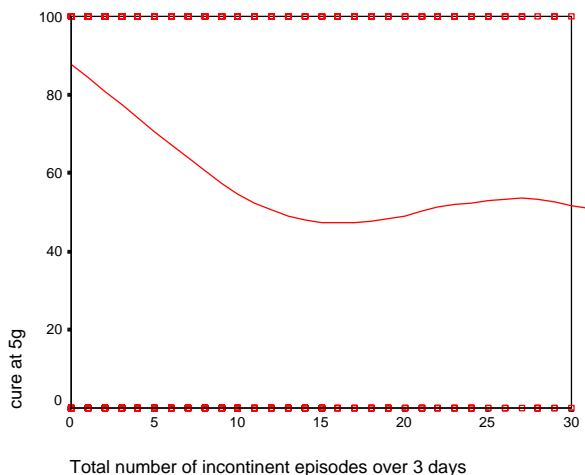
Within a research study 1438 women were recruited and treated with a package of evidence based primary interventions including fluid and diet advice, bladder re-education and simple pelvic floor exercises. All were assessed before and after treatment using a 24 hour home pad test (HPT) and a 3 day urinary diary from which incontinence episode frequency (IEF) was calculated. The chance of successful treatment was compared with severity of incontinence using HPT and IEF.

Results

1259 (88%) completed all assessments. There was a strong relationship between loss on the HPT and chance of cure.



This was less clear for IEF.



Grades of incontinence were developed from the HPT as seen in the table. The majority of women in this setting had mild or moderate incontinence (80% and 15%). Women with more severe grades of incontinence consistently did less well from primary interventions in terms of incontinence, quality of life and need for further investigations or interventions.

Table of outcome of treatment by grade (%)

	Mild 0-15g	Moderate 15.1-60g	Severe 60.1-100g	Very Severe >100g
Minimal leak on pad test (<5g)	78	36	8	6
No leaks on diary	55	31	14	9
Still using pads	36	67	67	97
Significant affect: WHO QOL score	5	13	43	33
Activities	4	12	26	34
Feelings	6	16	48	29
Patient felt significantly improved	59	54	26	31
Wanted further treatment	37	49	63	66
Went forward for urodynamics	33	45	66	66

Interpretation of results

This grading system seems to be predictive of treatment outcome and may be helpful in decision making. Women with mild-moderate incontinence are likely to respond to simple interventions and the primary use of medication or surgery seems unwarranted. Patients with severe or very severe incontinence may benefit from early use of medication or referral. The use of the scale in other settings and in particularly before surgery needs further evaluation.

Concluding message

The 24 hour home pad test is better than incontinence episode frequency as a prognostic measure of incontinence severity. Widespread use of a simple grading system would allow this important prognostic factor to be controlled for when comparing services or treatments.

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