A New Objective Scoring System To Clinically Assess Fecal Incontinence

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INTRODUCTION:

Several scoring systems are used to assess fecal incontinence (FI), among which the most commonly used are Wexner and Vaizey's scoring systems. However, there are significant lacunae in these scoring systems, due to which they are neither accurate nor comprehensive. The aim was to develop a new scoring system for FI that is accurate, comprehensive, and easy to use.

METHODS:

A pro forma was made in which six types of FI were included: solid, liquid, flatus, mucous, stress, and urge. The weight for each FI was determined by asking a group of patients and laypersons to give a disability score to each type of FI from 0 to 100 (0m least, 100, maximum disability). The disability was assessed on a modified EQ-5D+ (EuroQol) description system, 4D3L (4 dimensions and 3 levels) for each FI. The average score of each FI was calculated, divided by 10, and rounded off to determine the weight of each FI type. The scores for the three levels of frequency of each FI were assigned as never = 0 (No episode of FI ever), occasional = 1 (≤1 episode of FI/ week),, and common = 2 (>1 episode of FI/ week), and was termed as frequency score. The score for each FI would be derived by multiplying the frequency score and the weight for that FI type. In the second phase of the study, a group of colorectal surgeons was asked to rank the six FI types in order of severity, and their ranking was compared with the patient and laypersons' rankings.

RESULTS:

Fifty patients and 50 laypersons participated in the study. After a detailed statistical analysis, the final weights assigned to solid, liquid, flatus, mucous, stress, and urge FI were 8, 8, 6, 6, 5, and 7, respectively. and a new scoring system was formulated. The maximum possible score was 80 (total incontinence), and the least 0 (no incontinence). The surgeons' ranking of FI severity did not correlate well with patients' and laypersons' rankings of FI, highlighting that surgeons and patients may perceive the severity of FI differently.

CONCLUSION:

A new scoring system for FI was formulated, which was simple, logical, comprehensive, and easy to use. It eliminated all shortcomings in the existing scoring systems (Wexner's and Vaizey's), especially assigning equal weightage to all types of FI by previous scoring systems. Patients' and surgeons' perceptions of FI severity of FI did not correlate well.

Garg Incontinence Scores

Table 8 New scoring system

Incontinence type	Weight	Frequency			Maximum score
		Never (points)	Occasional (points) (≤ 1 episode/ wk)	Common (points) (> 1 episode/ wk)	
Solid	8	0	1	2	16
Liquid	8	0	1	2	16
Urge	7	0	1	2	14
Flatus	6	0	1	2	12
Mucus	6	0	1	2	12
Stress	5	0	1	2	10
Total					80

Score=80 → Total Incontinence

Score=0 → Normal Continence