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Title (type in CAPITAL LETTERS, leave one blank line before the text)	RELATIONSHIP BETWEEN DETRUSOR INSTABILITY AND RECTAL CONTRACTIONS AND ITS CLINICAL RELEVANCE.
	<p>Aims of Study: Detrusor instability (DI) is the most common cause of urinary urgency, frequency, and urinary incontinence, particularly in the elderly. However, functional evidence of detrusor instability is often difficult to elicit during urodynamic evaluation despite symptoms of urgency and urge incontinence. Like DI, bowel disorders are highly prevalent in the elderly and are associated with significant health care costs. Symptoms affecting the bladder and recto-sigmoid colon often coexist [1,2], indicating a common pathophysiology at the level of integration or regulation of pelvic viscera. A previous study suggests that detrusor overactivity is associated with the presence of rectal contractions [3]. The aim of this study was to determine the relationship between detrusor instability and rectal contractions, and determine its clinical relevance in identifying detrusor instability in the absence of unstable bladder contractions.</p> <p>Methods: Comprehensive videourodynamic studies from men without overt neurologic disease were retrospectively evaluated (n=30, age range = 35-81 years). Abdominal pressure measurements were acquired during medium-fill cystometry using a small rectal balloon catheter. The frequency and amplitude of rectal contractions were determined with respect to bladder capacity after the data was transformed using a first order low pass recursive filter and eliminating abdominal pressure changes. Studies from urodynamically normal patients (no detrusor instability, no bladder outlet obstruction, normal bladder contractility, n=16) and those with detrusor instability (n=6) or urge incontinence (n=8) were analyzed.</p> <p>Results: The frequency of spontaneous rectal contractions was not significantly different among patients with detrusor instability, urge incontinence (without urodynamic evidence of detrusor instability), or normal urodynamics. Rectal contraction amplitude was significantly higher in patients with detrusor</p>

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instability than in urodynamically normal patients. Even in patients without urodynamic evidence of detrusor instability but who complained of urge incontinence, the amplitude of rectal contractions near bladder capacity was significantly greater than in normal patients.

Conclusion: Our data demonstrate that marked rectal contractions develop during bladder filling in patients with detrusor instability compared to those with normal urodynamics. Since rectal contractions are also significant in patients with urge incontinence without urodynamic evidence of detrusor instability, the rectal pressure measurement pattern may provide indirect evidence of bladder dysfunction when detrusor instability cannot be elicited.

1. Gut 27:37-40, 1986.
2. Gut 27:1014-1017, 1986.
3. Neurourol Urodyn 14:73-80, 1995.