

RECTAL CONTRACTIONS DURING URODYNAMICS. AN ARTIFACT OR SIGN OF NEUROPATHY?

Hypothesis / aims of study

Rectal contractions are sometimes demonstrated during urodynamic examination and are usually considered as an artifact or incidental phenomenon. They may generate a wrong estimation of detrusor pressure's change. We noted that these contractions are common in patients with neurological diseases. Our aim was to evaluate the frequency of rectal contractions in patients with and without neurological diseases.

Study design, materials and methods

We retrospectively reviewed 121 urodynamic traces for rectal contractions. 86 patients had not a neurological history and 35 were neurological patients (27 with multiple sclerosis and 7 with spinal cord injury). All studies were performed using an analog recorder at 0.5 mm/sec paper speed. Multichannel pressures included total vesical pressure measured by a urethral catheter, total abdominal pressure measured by a rectal balloon catheter, subtracted detrusor pressure (vesical minus abdominal), and uroflow measurement. We defined rectal contraction as an increase of abdominal pressure >5 cm H₂O, without alteration of intravesical pressure and associated with negative deflection of detrusor pressure.

Results

15 neurological patients had rectal contractions during urodynamics (43%) and only 14 patients without neurological history (17%). 13 of these 15 neurological patients (87%) had also neurogenic detrusor overactivity.

Interpretation of results

Rectal contractions are very frequent in patients with neurological diseases. They also coexist in a great percentage with neurogenic detrusor overactivity, which may reflect similar innervation. Further studies are required to estimate the significance of this observation.

Concluding message

The rectal contractions during urodynamics may not be artifactual and might be a sign of neuropathy.

Specify source of funding or grant	NONE
Is this a clinical trial?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	ETHICS COMMITTEE OF THE UNIVERSITY HOSPITAL OF HERAKLION
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes