

The standardization of urodynamic reporting in the *International Urogynecology Journal*

Gunnar Lose¹ · Peter L. Dwyer² · Paul Riss³

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The international Urogynecological Association through the Standardization Committees has developed a structure for reporting scientific information so that we can all speak the same language, and clinical results from one study can be more easily compared with those of another. Standardization documents cover symptoms and physical findings of pelvic floor dysfunction, investigations and results of conservative and surgical treatments, both good and bad (complications). The “Instructions to authors” asks authors to follow these requirements and to state in the Methods section that they have done so.

The reporting of urodynamics (UDS) in medical journals has become increasingly unclear and confusing obstructing the usability of reported UDS data. In some papers UDS implicitly means invasive UDS [1], while in others, even review papers, it is not clear what UDS means [2]. Consequently, terms such as “urodynamic investigation”, “multichannel urodynamics”, “urodynamic testing” and “urodynamic study” are ambiguous.

UDS denotes functional studies of the lower urinary tract [3]. UDS includes a spectrum of *noninvasive* tests (such as free uroflowmetry and postvoid residual volume by ultrasonography) and *invasive* tests (urethral pressure measurement, cystometry, pressure flow, leak point pressure) distinguished

by the need for catheterization. Thus, the selected “UDS” tests in one study are not necessarily the same as the “UDS” tests in another study. Therefore, the term “urodynamics” is unclear and requires descriptions of the individual noninvasive and invasive tests. Furthermore, the individual tests should be described in detail; e.g. cystometry can be carried out in a variety of different ways (position of patient, filling rate, pressure measurement etc.) providing data that are not compatible. This is also the case for urethral pressure measurement which depends on, among other things, the type, size and material/flexibility of the catheter, the orientation of the directional sensor, the position/fixation of the sensor, the zeroing of pressure sensors, and the recording apparatus [4]. Therefore, the individual test should be clearly described and the reliability reported. In this context it is important to refer to the IUGA/ICS terminology report [3] and to state if the methods, definitions and units conform to or deviate from the standards recommended.

Good urodynamic practice (GUP) clearly requires explanation of the principles on which the different tests are based. One fundamental issue is to raise a urodynamic question and obtain an answer, and these should be clearly presented in articles describing UDS studies [5]. Routine use of invasive UDS is not in accordance with the principles of GUP and is seldom recommended. The use of uroflowmetry and postvoid residual urine screening is appropriate before “obstructive” interventions, e.g. antiincontinence surgery to rule out preexisting voiding dysfunction (VD). The UDS parameters used should also be clearly described/defined. Generally, “home-made” definitions are unacceptable. VD is defined as “abnormally slow and/or incomplete micturition which implies an abnormally slow urine flow rate and abnormally high post-void residual urine” [3]. The diagnosis of VD should be based on reference nomograms or normal values for flow rates and postvoid residual. At present there is unfortunately no

✉ Gunnar Lose
Gunnar.Lose@regionh.dk

¹ Department of Obstetrics and Gynecology, Herlev Hospital, Pavillon B, Herlev Ringvej, DK-2730 Herlev, Denmark

² Department of Obstetrics and Gynaecology, Mercy Hospital for Women, University of Melbourne, Melbourne, Australia

³ Department of Obstetrics and Gynecology, Medical University Vienna, Vienna, Austria

consensus on how to separately define hypoactive detrusor VD and obstruction VD.

The Editors of the *International Urogynecology Journal* have decided to improve the quality and usability of reported UDS data in the journal. This is now specified in the “Instructions to authors”.

Therefore, the editorial process for papers including UDS data will focus on:

1. Clear definition of UDS, and which individual tests were performed and how.
2. Reference to the IUGA/ICS terminology report where appropriate. It is a requirement in the “Instructions to authors” that the standards recommended in the terminology report are followed and that this should be stated in the Methods section of any manuscript submitted to the *International Urogynecology Journal*.
3. Following the principle of GUP.
4. Clear definition of the UDS parameters used.

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