

URODYNAMIC PROCEDURES ARE ON THE RISE IN THE UNITED STATES

Hypothesis / aims of study

Most of the urodynamic literature focuses on the indications for urodynamic studies (UDS) for treatment of urinary incontinence and voiding dysfunction. Much less is known about the frequency with which UDS is being performed and trends in UDS practice among urologists. The objective of this analysis was to describe trends in the practice of UDS among urologists who applied for American Board of Urology (ABU) certification and recertification from 2003 to 2007.

Study design, materials and methods

Following approval by the American Board of Urology (ABU), ABU analysts electronically queried the 6-month procedure logs submitted by applicants for part II ABU certification or recertification during 2003-2008. The number of procedures with UDS Common Procedural Terminology codes (CPT) were abstracted (51725, 51726, 51741, 51772, 51784, 51785, 51792, 51795, and 51797) along with the certification status, certification year, patient gender and , International Consultation on Disease (ICD-9) diagnosis.

Video-urodynamics do not have a specific code. For this study, video-urodynamics were identified by querying the data base for the use of any UDS procedure code with the addition of any radiological CPT code (74430, 74455, 74450, 76000, or 76001) on the same day.

Results

During a 5-year period 3,246 urologists submitted practice logs to the ABU representing 31% of board-certified urologists in the United States. Thirty-five percent of the applicants were applying for certification and 65% for recertification. From 2003 to 2007 the number of urologists applying for certification and recertification increased by 11.9% and 29.4%, respectively (see Table 1).

The percentage of urologists performing urodynamics over a 5-year period increased from 81.6% to 94.3% of certifying urologists and from 70.3% to 88.7% of recertifying urologists. The number of urodynamic procedures performed by certifying and recertifying urologists over a 6 month period more than doubled over the last 5 years. This was primarily due to an increase in the number of procedures per applicant which increased from 83 to 225 UDS procedures per applicant during 2003 – 2007 (see Figure). Likewise, recertifying urologist total procedures over 5 years increased by 238%. This was in part due to a 29% increase in urologists who were recertifying and a 161% increase in the number of urodynamic procedures per applicant (125 to 328). It is evident that there was a dramatic increase in the number of urodynamic procedures performed from 2004 to 2005. Recertifying urologists increased their UDS procedures per applicant by 53% while certifying urologists increased their procedures per applicant by 110%.

The change in specific urodynamic procedures is demonstrated in the table below. Measures of sphincteric integrity such as urethral pressure profiles and Electromyography studies have had the greatest increase in usage.

Video-urodynamics represent 3.3% of all urodynamic procedures performed. Likewise, a small number of urologists (3.9%) perform video-urodynamics. The results are similar for certifying (4.4%) and recertifying urologists (3.7%).

Percent change in specific UDS procedures from 2003 – 2007 by certification status

	Certifying%	RE Certifying%
Simple Cystometrogram	-85%	-57%
Bladder pressure measurement-CMG	107%	144%
Stimulus evoked response	279%	147%
Complex uroflowmetry	166%	225%
Voiding pressures: bladder	263%	331%
Voiding pressures: intraabdominal	447%	386%
EMG: urethral or anal (other than needle studies)	386%	520%
Urethral pressure profile studies	635%	909%
Needle EMG studies urethral or anal	99%	2944%

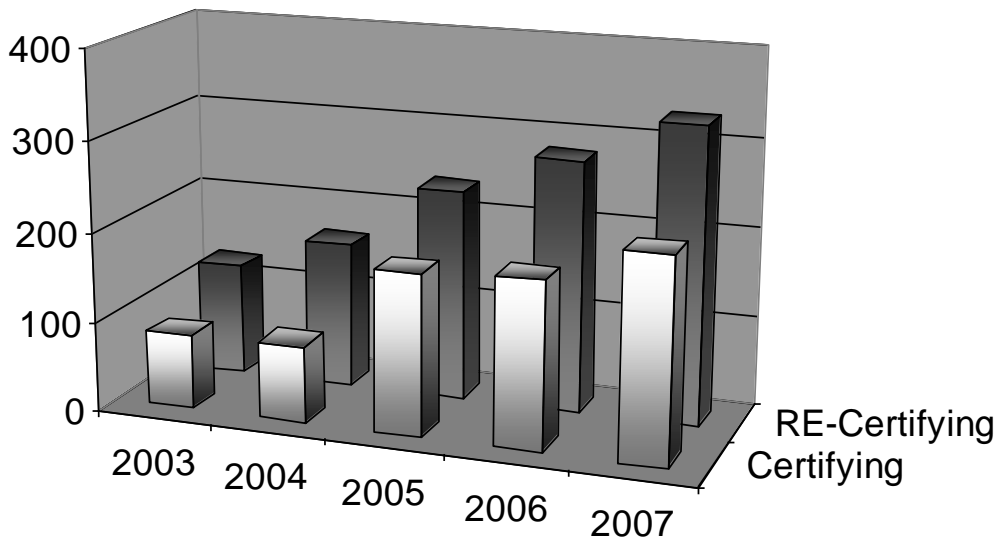
Interpretation of results

The use of urodynamic procedures in the United States increased significantly over the 5 year time period studies. This is true for first-time board certifying urologists and for those who are has been in practice for greater than 10 years.

Concluding message

New and practicing urologists in the United States have increased their use of urodynamics in their practice. Further studies are warranted to determine the efficacy of UDS in diagnosis and treatment of lower urinary tract dysfunction.

UDS Procedures Performed per ABU applicant from 2003 to 2007



Specify source of funding or grant

None

Is this a clinical trial?

No

What were the subjects in the study?

NONE
