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SHOULD MEASUREMENT OF MAXIMUM URINARY FLOW RATE AND RESIDUAL URINE BE A PART OF A "MINIMAL CARE" ASSESSMENT PROGRAM IN FEMALE INCONTINENCE ?

AIMS OF STUDY: To evaluate the value of routine measurements of uroflow rate and residual urine as a part of a "minimal care" assessment program for women with urinary incontinence in detecting clinical significant bladder emptying problems

METHOD: 408 consecutive women were examined and treated in an open-access, interdisciplinary incontinence clinic (1) A standardised program for investigation and primarily non-surgical treatment of incontinence with limited consumption of resources was applied The investigation programme included a structured questionnaire for patients history, evaluation of quality of life by SF-36, a 3-day voiding diary, 24-hour home pad test, urine-screening, uroflowmetry, measurement of residual urine volume by ultrasonography and a pelvic examination Invasive urodynamic examination was only performed in 13 % of the women

RESULTS: Of the 408 women (median age 68 years, range 18-92) 43 % complained of impaired bladder emptying, 22 % of chronic/recurrent cystitis, 8 % of weak stream and 18 % of symptoms of genital descent Residual urine > 150 ml was found in 6%, and 31% had a maximum flow rate < 15 ml/sec Two women had chronic retention and overflow incontinence, confirmed by residual urine of 400 and 500 ml urine respectively Both had typical symptoms with continuous leakage, stranguria and chronic cystitis Furthermore, one of them had a grade 3 cystocele

In the group with symptoms referring to bladder emptying problems, all but 3 were managed by triple voiding and timed micturition In these 3 patients, who also had chronic cystitis, the treatment was supplemented with clean intermittent self-catheterization

The measurements of residual urine and maximum urinary flow varied very much in the patient groups, divided according to symptoms of stress-, urge- or mixed-incontinence Residual urine stress 33 9 (SD 40 6) ml , urge

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60 4 (SD 65 6) ml and mixed 47 6 (SD 54 9) ml Max flow rate stress 26 3 (SD 12 8) ml /s, urge 25 6 (SD 43 5) ml /s and mixed 23 0 (SD 13 7) ml /s Even if mean values reached statistical difference, it was found to be of no clinical value

CONCLUSION: The few women in which measurements of uroflow and residual urine had a clinical therapeutic consequence, cannot justify the measurements to be part of a "minimal care" assessment Many women complained of symptoms of impaired bladder emptying and recurrent cystitis Only 3 could not be managed with advise of "good voiding habits" according to their voiding charts The 2 women with chronic retention were diagnosed alone from history, pelvic examination and voiding pattern Only with a history of recurrent cystitis not responding to timed micturition and triple voiding is the measurement of residual urine of therapeutic consequence, as long as only non-surgical treatment is considered

Reference

1 Evaluation of a simple, non-surgical concept for management of urinary incontinence (minimal care) in an open-access, interdisciplinary incontinence clinic Neurourol Urodyn 19 9-17 (2000)