subtraction in all 3, but with some other evidence of imperfect pressure transmission in 2 patients. ACs were noted in 4 of the patients who voided. In all 4 cases, the peak pressure measured by MT during ACs was higher than with ET (+23 to +168 cm H_2O), despite otherwise good evidence of equal pressure transmission in 3 out of 4.

CONCLUSIONS – the differences in absolute resting pressures recorded using ETs and MTs are relatively modest, but should perhaps be borne in mind when analysing absolute p_{abd} or p_{ves} values, e.g. during leak point pressure measurement. Differences in resting p_{det} are small, and in the sitting and standing positions are not likely to have a signifcant impact on the interpretation of UDS results. However, comparison of simultaneous measurement with ETs and MTs showed moderate or large differences in the magnitude of changes in p_{det} in 7 of 19 patients, despite apparently good pressure transmission in both systems in most cases. Whether these differences reflect problems with ETs (e.g. kinking of fluid-filled tubing), or MTs (e.g. direct contact of the bladder wall with the transducer), or both, is unclear. This small study suggests that it cannot be assumed that detrusor pressure changes are measured equally by different measurement systems. The quantification of p_{det} changes with ETs and / or MTs - e.g. in diagnosing bladder outlet obstruction or in grading detrusor instability - may be less accurate than previously thought. As both systems are widely used, this is an area worthy of further study.

REFERENCES – 1. Proceedings of the 12th Annual Meeting of the ICS, Leiden, 1982, pp 53-5.

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Title (type in CAPITAL LETTERS, leave one blank line before the text):
SENSATIONS DURING URODYNAMICS AND SENSATIONS SCORED IN VOIDING DIARIES: ARE THEY COMPARABLE?

AIMS OF STUDY: In idiopathic detrusor instability an objective diagnosis is made with urodynamic investigations. The severity of the patients' symptoms of urge and frequency correlate poorly with urodynamic findings [1]. Traditionally detrusor instability has been the main focus for diagnosing patients and directing their management. Little progress has been made with the evaluation or management of the sensations of urge. The presence of an indwelling catheter can produce the perception of urge [2] which may confound the urodynamic assessment. We have developed a more objective measure of the sensations perceived by patients during filling cystometrograms. The aim of this study was to compare the graded scores of sensations of urge recorded by the patients in voiding diaries with the same graded urge scores measured objectively during filling cystometrograms.

METHODS: 5 patients with an established diagnosis of idiopathic detrusor instability were studied. Medication prescribed for an overactive bladder was discontinued. Patients completed a voiding diary for one week. In this diary they recorded the measured volume of each void, whether they felt empty after voiding and the degree of urgency prior to voiding. The degree of urgency was scored from 0 to 4 where 0 = no urge, 1 = mild urge, 2 = moderate urge, 3 = strong urge and 4 = "desperate" urge. Patients then attended the urodynamic department for medium fill cystometry. Serial CMGs were performed and during each CMG a keypad device was used by the patients to score their levels of urge, according to the same scale used in the diary. The keypad device enabled patients to signal their sensations without prompting by, or discussion with, the investigator. The urge score was continuously recorded on our standard urodynamic equipment. Sensations recorded in diaries were then compared to those obtain during CMGs.

RESULTS: Correlation between the 4 point urge score recorded in voiding diaries and the urge score recorded during filling cystometry was good in 4 patients. In the other patient, bladder volumes recorded during urodynamics were less than those recorded in the diary for each urge level scored. It is possible this effect was due to catheter interference. All other patients did not consider that the catheter interfered with their perception of bladder sensation.

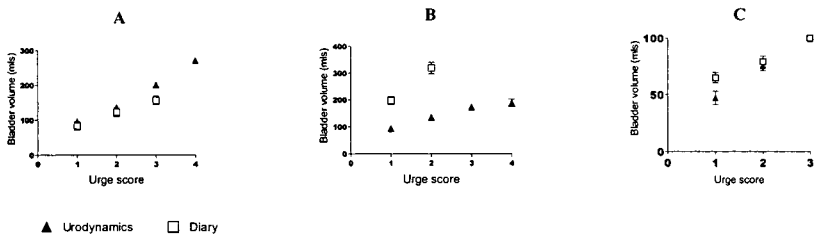

Figure 1. Graphs A and B are plots of mean bladder volumes and SEM against urge score from individual patients. Graph C shows mean bladder volume and SEM at urge scores 1-3 (n=4). This data is from the 4 patients' in whom urge scores derived from both diaries and urodynamics compared well. This data has been normalised around urge level 3. One patient may have had altered perception of urge during urodynamics due to catheter irritation (graph B).

CONCLUSIONS: There is a clear trend in 4/5 patients of comparable urge scores when these scores are obtained by voiding diaries or objective urodynamic investigation. Evaluation of the sensations of urge are essential for a systematic approach to patient management. This more objective assessment of patients' sensations of urge during filling cystometrograms is a useful tool for diagnosis and surveillence of treatments in patients with detrusor instability. However, interpretation of sensations during urodynamics must remain cautious and must be supplemented with a thorough voiding diary.

1. *Urological Clinics of North America.* 1996;23:417-425
2. *European Urology.* 1999;35(supp 2):55

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Title (type in CAPITAL LETTERS, leave one blank line before the text):
URODYNAMIC PARAMETERS IN OBSTRUCTED WOMEN

AIM OF STUDY

The diagnosis of voiding difficulties in women is not very well defined. In fact, compared to men, different anatomical and physiological aspects must be considered (prolapse, shorter urethra etc). In clinical practice the symptoms rarely combine with urodynamic parameters and it is still disputable which are the ones more indicative for voiding problems. The pressure/flow study nomograms applied for men are not reproducible in women and only in few cases it is possible to define an obstructed patients on the basis of urodynamics.
The aim of this study was to evaluate in a group of frankly obstructed women if any urodynamic parameter, apart from the peak flow rate and the maximal detrusor voiding pressure, could be indicative of bladder emptying difficulties in order to use them in less evident situations to help diagnosis.