Urodynamics	First Sensation	Max. Capacity	Sens Urgency	DI
US parameters				
RVA-S	p= 0.370	p= 0.160	p=0.11	p=0.042
Rotation	p= 0.550	p= 0.533	p=0.15	p=0.10
BND	p= 0.858	p= 0.628	p=0.23	p=0.014
Cystocele	p= 0.511	p= 0.909	p=0.048	p=0.0026

Table 2: Correlations between indices of vaginal relaxation and urodynamic findings. Pearson's correlation coefficient or t- test. All significant relationships are negative.

Table 2 demonstrates correlations between descent parameters and urodynamic signs of bladder irritability. There were no positive correlations. Sensory urgency was negatively associated with descent of cystocele, and detrusor instability was negatively associated with opening of the retrovesical angle, bladder neck descent and descent of a cystocele.

Conclusion

This retrospective study evaluated imaging data and urodynamic reports from 272 women suffering from symptoms of lower urinary tract dysfunction. Opening of the retrovesical angle, bladder neck descent, urethral rotation and descent of a cystocele during Valsalva were used to quantify anterior vaginal wall laxity. None of those parameters were associated with symptoms and signs of detrusor overactivity. On the contrary, patients with higher grades of urethral and bladder descent were less likely to suffer from nocturia and urge incontinence and were less likely to have sensory urgency and detrusor instability diagnosed on urodynamic testing.

Literature

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Title (type in CAPITAL LETTERS, leave one blank line before the text):

THE EFFECT OF ALTERING URINARY pH ON URINARY SYMPTOMS IN WOMEN

Aims of study:

Detrusor instability is a common complaint among women. Anecdotal reports suggest that alkalinising urine may improve symptoms of frequency and urgency, and intravesical administration of sodium bicarbonate has been shown to increase bladder capacity in patients with detrusor instability[1]. There is some evidence that women with detrusor instability may have a lower urinary pH than those with stable bladders[2]. This study was designed to determine whether alkalinising urine would improve symptoms in women with detrusor instability.

Methods:

A randomised double-blind controlled study of the effect of placebo versus sodium bicarbonate was conducted among women with urodynamically proven detrusor instability. The dose of sodium bicarbonate used in the study was determined from a pilot study among volunteers, and was the dose that increased the mean daily pH by 1. The study lasted four weeks and consisted of a baseline week, a week of either 5.4 gms sodium bicarbonate or placebo, a washout week and a final week of either 5.4 gms sodium bicarbonate or placebo. All women took both placebo and sodium bicarbonate, but they were randomised to the order in which they took these. Urinary diaries including information concerning episodes of urgency and leakage were kept during all weeks apart from the washout week. Women tested their urinary pH with labsticks three times a day during the study. A 24 hour pad test was completed at the end of each week as well as a short symptom questionnaire. General linear models were fitted to the data after

log transformation. Baseline readings and correlations between observations on the same patient were allowed for within the model and F-statistics were used to test for differences between sodium bicarbonate and placebo.

Results:

35 women completed the study. The mean age of the women was 49 years (range 23 to 71 years). The mean daily pH was 6.1 for the baseline week, 6.1 for the placebo week and 6.9 for the week when sodium bicarbonate was taken. Table 1 shows the mean number of daily episodes of urgency and wetting, frequency and 24 hour pad weights. The difference in 24 hour pad weights was the only statistically significant result with increased leakage occurring in the week that sodium bicarbonate was ingested.

There was no difference in the quality of life impact of urinary symptoms for either group with the mean impact of their urinary symptoms on their daily life reported as "somewhat" for the period of the study.

Table 1: comparing the mean number of daily episodes of urgency and wetting, frequency and pad weights. The means reported are geometric rather than arithmetic means in view of the log transformation of the data.

	sodium bicarbonate week (95% CI)	placebo week (95% CI)	p value
mean no. urge episodes per 24 hrs	7.5 (6.9-8.0)	7.1 (6.6-7.6)	0.07
mean no. wetting episodes per 24 hrs	2.2 (1.9-2.4)	2.2 (2.0-2.5)	0.64
mean 24 hr frequency	8.8 (8.4-9.3)	8.6 (8.2-9.1)	0.43
increase in 24 hr pad weight (gms)	10.8 (8.1-14.3)	8.5 (6.4-11.2)	0.01

Conclusions:

It is a common belief that urinary pH may affect detrusor instability, and the variation between the pH of infused fluids and urine has been proposed as the reason for the presence of increased detrusor contractility during ambulatory monitoring when compared with routine cystometry. However, our study has not confirmed this belief, as increasing urinary pH had no effect on the symptoms associated with detrusor instability, apart from the 24 hour pad weight. The number of wetting episodes did not change with treatment and therefore the clinical significance of this result is unclear. Urinary pH alone does not therefore appear to be related to the symptoms of detrusor instability. We feel that this is important clinical information as it negates the advice often given to patients with urinary frequency.

References:

1 Br J Urol 1987 60: 516-518

2 Neurourol 1990 9: 331-332

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Title (type in CAPITAL LETTERS, leave one blank line before the text):

ONE-YEAR, PROSPECTIVE, OPEN-LABEL TRIAL OF CONTROLLED-RELEASE OXYBUTYNIN FOR OVERACTIVE BLADDER IN A COMMUNITY-BASED POPULATION

Aims of Study: Conventional oxybutynin is safe and effective for the treatment of overactive bladder (OB), but discontinuation of treatment due to dry mouth often precludes long-term treatment. Controlled-release oxybutynin has been shown to be comparably effective with less dry mouth than conventional oxybutynin in short-term studies. In a long-term, open-label study, we assessed improvement in the bothersomeness of the condition, patient satisfaction with treatment, and discontinuation of treatment due to dry mouth in over 1000 community-based patients using controlled-release oxybutynin for 12 months.
Methods: This was an open-label, non-randomized study enrolling adults with OB. Patients received their individual optimum dose of controlled-release oxybutynin ranging from 5-30 mg/day. Adverse effects and reasons for discontinuation of treatment were recorded. At baseline and after 3, 6, or 12 months of treatment with controlled-release oxybutynin, patients completed four instruments to assess different aspects of quality of life: General Health and Bothersome Scale, Sleep Impact Question, Individual Incontinence Impact Questionnaire, and Patient Satisfaction Scale.