

BLADDER COMPLIANCE IN MEN WITH LOWER URINARY TRACT SYMPTOMS.

Hypothesis / aims of study

To determine whether there is a relationship between bladder compliance in men with lower urinary tract symptoms (LUTS) and the degree of urethral obstruction, prostate size, detrusor overactivity, and age.

Study design, materials and methods

This is a retrospective observational study of consecutive men 18 years of age or older, identified from our database, who underwent evaluation because of persistent LUTS. All patients underwent focused history & physical examination, bladder diary, urinalysis & urine culture, cystoscopy & videourodynamic studies. Exclusion criteria included urethral stricture, prostate cancer, prior prostate surgery, active bladder cancer, neurogenic bladder. Urethral obstruction was defined by the Schafer bladder outlet obstruction nomogram (grades obstruction from 0-6). Prostate size was defined as 0-4+ (0 = smaller than normal, 1+ = normal, 2 - 4+ = increasing prostatic size) (1).

Results

Of 314 patients screened, 229 were excluded because of one or more exclusion criteria. The 85 remaining patients ranged in age from 31-89 yrs (mean = 63, SD = 13). An inverse correlation was found between bladder compliance & Schafer obstruction grade (Spearman's rho= -.276, p=.011). No correlation was noted between bladder compliance and prostate size (Spearman's rho=.076, p=. 50), detrusor overactivity (Spearman's rho= -.17, p=.33) or age (Spearman's rho=.01, p=.93).

Interpretation of results

There is an inverse relationship between bladder compliance and Shaefer grade of prostatic obstruction.

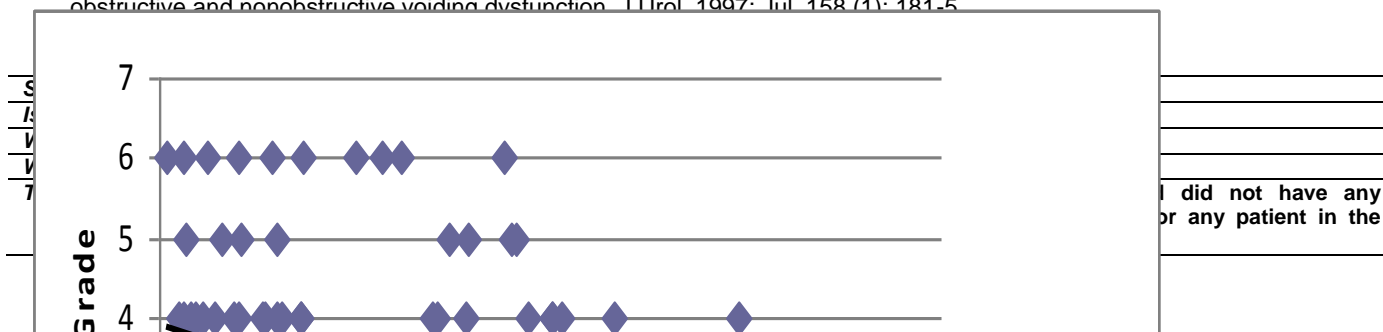
Concluding message

Since low bladder compliance is an important risk factor for the development of upper urinary tract disease, proactive treatment and careful monitoring of patients with high degrees of urethral obstruction should be considered (2,3).

Figure1: Relationship between Compliance and Schafer Grade Obstruction.

References

1. Roehrborn, C, Sech, S, Montoya, J, Rhodes, T, Girman, C: Interexaminer reliability and validity of a three-dimensional model to assess prostate volume by digital rectal examination. Urology 2001; Jun 57(6):1087-92.
2. Rule, A., Jacobson, D., Roberts, R., Girman, C., McGree, M., Lieber, M., Jacobsen, S.: The association between benign prostatic hyperplasia and chronic kidney disease in community-dwelling men. Kidney International 2005; 67: 2376–2382.
3. Comiter CV, Sullivan MP, Schacterle RS, Cohen LH, Valla SV: Urodynamic risk factors for renal dysfunction in men with obstructive and nonobstructive voiding dysfunction. J Urol. 1997; Jul; 158 (1): 181-5



<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	No
