

LOW BLADDER CAPACITY IS AN IMPORTANT PREDICTOR FOR COMORBIDITY OF INTERSTITIAL CYSTITIS WITH HUNNER'S LESION IN PATIENTS WITH REFRACTORY CHRONIC PROSTATITIS/CHRONIC PELVIC PAIN SYNDROME (CP/CPPS)

Hypothesis / aims of study

The treatment of CP/CPPS is often challenging. There is also an overlapping in the symptoms of CP/CPPS with those of interstitial cystitis/bladder pain syndrome (IC/BPS). However, the association between IC and CP/CPPS has not been well studied. We have previously reported the usefulness of urethrocytostcopy assisted with narrow band imaging (NBI), which enhances the contrast of superficial vascular formation in the bladder mucosa, for the diagnosis of IC/BPS (1). Here, we evaluated the predictive factor(s) for comorbidity of Hunner-type IC in CP/CPPS patients using NBI-assisted flexible urethrocytostcopy.

Study design, materials and methods

The study population included 32 male patients diagnosed with CP/CPPS according to the NIH classification from April, 2012 to April, 2016, and whose symptoms were not improved by 3 months of behavioral and pharmacological therapies including a 1-adrenoceptor blockers. The patients' age ranged from 23 to 84 years (mean, 59.1 years). The mean total score of the National Institute of Health Chronic Prostatitis Symptom Index was 22.8, and pain, urinary, and quality of life subscores were 9.7, 5.1, and 8.1, respectively. Urethrocytostcopy with NBI was then performed in all subjects under local anesthesia with 4% lidocaine. We assessed whether the presence of Hunner's lesions is associated with other variables such as age, symptom scores, maximal voided volume per micturition, maximal bladder capacity during cystoscopy and the presence of inflammatory polyps at the prostatic urethra.

Results

Thirteen out of 32 patients (41%) had Hunner's lesions. Among the variables, maximal voided volume (106 ± 29 ml vs 171 ± 61 ml; mean \pm SD) and bladder capacity (269 ± 121 ml vs 407 ± 136 ml) were significantly smaller, and the prevalence of prostatic urethral polyps (30.8% vs 57.9%) was not significantly different in patients with Hunner's lesions compared to those without. Other variables except age were not significantly different (Table1). Also, patients with voided volume below 150 ml were more likely to have Hunner's lesions than those with voided volume of 150 ml or more with sensitivity and specificity of 100% (13/13) and 63.2% (12/19), respectively.

Interpretation of results

Hunner-type IC seems to be a common comorbidity in patients with refractory CP/CPPS, especially when their maximal voided volume is less than 150ml. Their small bladder capacity may partly be explained by the existence of Hunner's lesions. Prostatic urethral polyp is also a prevalent finding in those patients. Further investigations are needed to elucidate whether there is any association between Hunner's lesions and urethral polyps.

Concluding message

In refractory CP/CPPS patients whose voided volume is small, performing NBI-assisted urethrocytostcopy should be taken into consideration for the reliable diagnosis of bladder and urethral mucosal changes such as Hunner's lesions and urethral polyps.

Table1. Comparison of the patients' characteristics between those with Hunner's lesions and those without

	Hunner's lesion	Mean	P value
Age	No	51.6	0.0253
	Yes	67.3	
Total score	No	23.6	0.6870
	Yes	22.2	
Pain subscale	No	10.7	0.3894
	Yes	8.9	
Urinary subscale	No	4.6	0.4398
	Yes	5.5	
QOL subscale	No	8.4	0.4944
	Yes	7.7	
Bladder capacity (ml)	No	406.8	0.0061
	Yes	268.5	
Voided volume (ml)	No	170.5	0.0004
	Yes	106.2	

References

1. Ueda et al., Int J Urol (2008)15: 1039-1043

Disclosures

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