body of evidence in order to define a "bladder phenotype." This bladder phenotype can be simply and objectively defined by the anatomical bladder capacity measured under general anesthesia. In the present study, we demonstrated a statistically significant difference between these 2 groups of patients in terms of voiding diary, urodynamic parameters, and finding of cystoscopy under general anesthesia.

Finally, this phenotype stratification based on anatomical bladder capacity also appears to be interesting to predict the efficiency of treatments, but this must be analyzed with other prospective studies.

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EDITORIAL COMMENT

The authors report bladder capacity (BC) under anesthesia (anatomic) in 134 patients with interstitial cystitis/bladder pain syndrome (IC/BPS). After dividing the cohort based on a cutoff of 400 mL, they found that patients with a lower capacity had increased urinary frequency and nocturia, lower urodynamic (functional) BC, and were more likely to have Hunner's lesions on cystoscopy. It is quite obvious that lower anatomic capacity is associated with worse frequency, urgency, nocturia, and functional capacity. However, the finding of a higher likelihood of harboring Hunner's lesions is of clinical significance because fulguration of ulcers typically results in dramatic symptomatic improvement.

There is little agreement regarding initial management for patients with IC/BPS. The European Society for the Study of Interstitial Cystitis and European Association of Urology recommend cystoscopy under anesthesia with hydrodistention (HD) and biopsy for the diagnosis of IC/BPS.[1,2] Similarly, the Japanese Urologic Association and the Society of Interstitial Cystitis of Japan suggest establishing the presence of Hunner's lesions or mucosal bleeding after HD.[3] On the other hand, the American Urological Association guidelines focus more on a clinical diagnosis, relegating cystoscopy and HD as third-line therapy.[4] However, there is nearly universal agreement that fulguration, vaporization or other treatment of ulcers nearly always leads to symptomatic improvement, that can last up to 3 years in half the patients.[5]

And while Hunner's lesions are relatively easy to identify either before or after HD, as "circumscript, reddened mucosal area with small vessels radiating toward a central scar, with a fibrin deposit or coagulum,"[1] currently they can only be identified and treated cystoscopically, which is often too painful to perform in the awake patient with IC/BPS. It can be frustrating, however, that in patients without ulcers, cystoscopic HD alone has shown inconsistent therapeutic results.[5]

Hence, the search for ways to predict the patients who are most likely to have bladder ulcers, and thereby benefit from cystoscopic HD and fulguration. Unfortunately, there are several studies that show a general lack of clinical differences between those with and without bladder ulcers with regard to urinary symptoms and pain.[6-8] While current trends in managing patients with IC/BPS have focused more on phenotyping patients based on bladder centric versus more systemic symptoms, such symptomatic grouping has not led to substantial improvements in treatment outcome. In contrast, there is a well-known substantial improvement in patients' symptoms following fulguration of bladder ulcers. It is clinically relevant, therefore, that the authors demonstrated that patients with <400 mL BC were 4 times more likely to have Hunner's lesions than those with BC > 400 mL, confirming results of a similar trial previously reported by Peters' group.[8] Perhaps future studies may use continuous modeling based on BC in those with versus those without Hunner's lesions. This type of work may yield an even stronger ability to predict the presence or absence of ulcers than that based on a predetermined BC cutoff, with the goal of establishing for which patients' cystoscopy and fulguration are indicated.

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