Female Urinary Retention at the University Hospital of the West Indies Challenging Diagnosis

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The Editor,

Sir,

Female urinary retention is a rare disorder and as such presents a management challenge for the urologist. It may be due to anatomical or functional abnormalities affecting either the detrusor muscle or the bladder outlet (1).

A retrospective analysis of all female patients diagnosed with urinary retention and admitted to the University Hospital of the West Indies from January 1, 2000 – December 31, 2008 was done. Patients were classified as having acute, acute-on-chronic or chronic urinary retention. The post-catheterization residual volume and presence of diuresis after initial presentation were recorded. Results of serum glucose, creatinine, Venereal Disease Research Laboratory (VDRL) test, serum Human T Lymphotropic Virus (HTLV-1), vitamin B_{12} , urine culture and kidney-ureter-bladder (KUB) ultrasound were recorded. Clinical outcome was classified as spontaneous voiding, intermittent catheterization or indwelling catheterization. The use of pharmacological or surgical therapy to assist voiding was documented.

A total of 23 patients were diagnosed with female urinary retention during the study period. Of these, eight were diagnosed with acute retention, eight with acute-on-chronic retention, six with chronic retention and one was unclassified. The mean age was 61 ± 20.7 years (mean \pm sd).

A suspected aetiological cause of urinary retention was documented in 20 patients of whom there were multiple in several cases. Mean post-catheterization residual volume (PVR) was 1200 mls. Patients with chronic urinary retention had a significantly higher PVR compared with acute/chronic and acute diagnoses (1896 \pm 991 *vs* 1519 \pm 549 *vs* 626 \pm 381 mls). Diuresis was noted in four patients post-catheterization.

Serum HTLV 1, 2 antibody titres, VDRL titres and vitamin B_{12} levels were normal in all tested. However, these investigations were not done in all patients. Glucose was

elevated in one diabetic patient. Serum creatinine was elevated in three patients. Ultrasound revealed hydronephrosis in five patients and pelvic masses in seven cases. Of the 23 patients, six underwent surgical procedures and four briefly used the α -adrenergic blocker, Tamsulosin. Of the subjects, 62% voided spontaneously after intervention, 24% performed clean intermittent self-catheterization and 14% were catheter dependent. There was no difference in voiding outcome by diagnosis.

The present study demonstrates that urinary retention is uncommon in Jamaican females and this is consistent with other reports in the literature. In this series, the commonest causes of urinary retention were due to diabetes mellitus and obstruction due to uterine fibroids. The lack of association of tropical spastic paraparesis in the current study was surprising, as this disease is endemic in Jamaica. Urologic manifestations are seen in as many as 90% of patients with Tropical spastic paraparesis/HTLV-associated myelopathy (TSP/HAM) and in many patients who are only seropositive, without TSP/HAM (2). Surgical treatment was attempted in a few patients; however most patients had a good prognosis with spontaneous voiding.

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