



Urinary Retention Presenting as Abdominal Tumor

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Abstract

Urinary retention is the inability to voluntarily void. Acute urinary retention is the sudden and often painful inability to void despite having a full bladder.

We present a 49-year-old woman presented to the emergency department with abdominal pain and distension and constipation for the last 30 days. She was admitted and a Foley catheter was inserted with 10 L of clean urine drained. After that, the abdominal distension resolved immediately.

Urinary retention, especially when it has a sub-acute course, presenting with abdominal mass with normal urine output, is difficult to diagnose. However, that diagnosis should be kept in mind when a patient with a painful and distended abdomen presents in the emergency department.

Introduction

Urinary retention is the inability to voluntarily void. Acute Urinary Retention (AUR) is the sudden and often painful inability to void despite having a full bladder [1]. Chronic urinary retention is usually a painless retention of urine associated with an increased volume of residual urine [2].

Causes of urinary retention can be categorized as obstructive, infectious, inflammatory, pharmacologic, neurologic, or other [3].

It is more frequent in men and the main causes are prostate benign hyperplasia, prostate cancer, urethral stenosis, clots, post-operative neurologic disturbances, calculi and urinary infections [3]. The incidence of urinary retention in women is not well documented in the literature and it is usually described in small case series/reports [4]. It is estimated that there are 3 cases of AUR per 100,000 women per year. Many causes of AUR in women are transient with no apparent cause, which makes its management more challenging [5].

AUR is associated with an impaired quality of life, stigmatization and a substantial socioeconomic burden [6-10].

The bladder globus is not an uncommon cause for using the emergency department and the diagnosis is not always easy.

So, we present a clinical case of a huge bladder globus that presents to our emergency department, in which the diagnosis was challenging.

Case Presentation

A 49-year-old woman presented to the emergency department with abdominal pain and distension and constipation for the last 30 days. She denied fever, nausea, vomiting or urinary symptoms.

She had a personal history of epilepsy, and she was on lamotrigine and levetiracetam. The surgical history included hysterectomy with bilateral salpingo-oophorectomy.

The physical examination revealed distended and diffusely painful abdomen without guarding. Results of blood work, such as blood count and type 2 urine were within normal range. Abdominal plain radiograph demonstrated a huge abdominal and pelvic mass (Figure 1).

Abdominal tomography scan reported a cystic formation measuring 32 cm × 24 cm, regular contours, thin walls and no enhancing with contrast and a bilateral moderated hydronephrosis (Figure 2).

The abdominal magnetic resonance imaging revealed a large and elongated cystic formation measuring 32.6 cm × 16.7 cm × 24.6 cm, without septum and solid component and severe huge

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Figure 1: Abdominal Plain Radiograph.

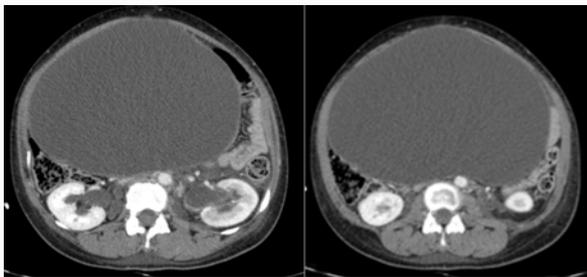


Figure 2: Abdominal Tomography Scan.

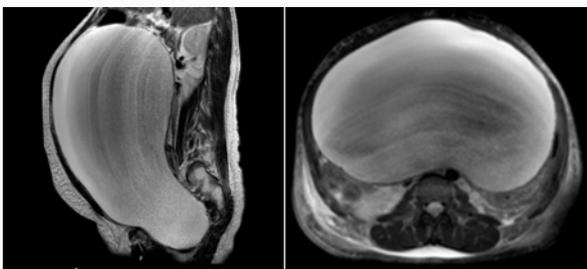


Figure 3: Abdominal Magnetic Resonance.

bilateral hydronephrosis (Figure 3).

The patient was admitted. The 24-h urine volume was normal.

Ca 19.9, Ca 125 e CEA were in normal range.

A Foley catheter was inserted with 10 L of clean urine drained. After that, the abdominal distension resolved immediately.

On the research exams of the AUR, it wasn't found any cause for the retention, and a neurogenic bladder was diagnosed.

Discussion

The International Continence Society defines AUR as, "a painful, palpable or percussible bladder, when the patient is unable to pass any urine" [11] and it is rare in women [12].

AUR is common diagnosis in the emergency department and it is characterized by sudden, painful inability to void [13]. However patients with acute on chronic retention, acute spinal cord compression, or those with underlying neuropathy may be less sensitive or insensitive to the pain associated with bladder

overdistension [14].

The physical examination may reveal suprapubic distension and dullness to percussion [15].

Treatment options for AUR include a progressive stepwise approach, from the least invasive to the most invasive procedure: Foley catheter placement, Coude catheter placement, and suprapubic catheterization [16].

The subsequent management varied, depending on the causes, gender, age and comorbidities.

Conclusion

Urinary retention, especially when it has a sub-acute course, presenting with abdominal mass with normal urine output, is difficult to diagnose. However, that diagnosis should be kept in mind when a patient with a painful and distended abdomen presents in the emergency department.

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