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Functional medicine

A rare entity of bilateral hutch diverticulum asymptomatic in adult revealed during the assessment of hematuria

Mustapha Rkik [a,b,*], Oussama Elidrissi [a,b], Issam Jandou [a,b], Mohammed Dakir [a,b], Adil Debbagh [a,b], Rachid Aboutaieb [a,b]

[a] Urology Department, CHU Ibn Rochd, Casablanca, Morocco
[b] Faculté de Médicine et de Pharmacie, Casablanca, Morocco

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ABSTRACT

Hutch diverticulum is a rare congenital entity that develops in the ureteral hiatus or in its proximity and is accompanied by reflux in most cases. There are very few reported cases and most of them are in children and predominately at solitary side. Adult cases are rare. We review the literature and present a case of a 65-year-old man with bilateral hutch diverticulum asymptomatic revealed during assessment of hematuria.

Introduction

Hutch diverticulum is a rare congenital entity that occurs in the ureteral hiatus, or alongside him, and is related to reflux in most cases, with added ureteral obstruction. There are very few reported cases and most of them are diagnosed in their first decades and predominately at solitary side. Adult cases are rare.[1] The treatment has been almost always ureteral reimplantation with or without diverticulectomy; in many occasions it appears together with obstruction ureteral; Early surgical treatment is generally recommended in these cases.[2,3] We present a case of a 65-year-old man with bilateral hutch diverticulum asymptomatic revealed during the hematuria assessment.

Case report

A 65-year-old previous healthy man, with no surgical history, presented to the emergency department with 15-day history of hematuria with blood clots, without renal colic and with no history of voiding difficulty. Digital rectal examination showed a small benign non-tender prostate.

In laboratory tests, creatinine levels were observed and an ultrasound was performed showing grade 3–4 bilateral ureterohydronephrosis up to the juxtavesical level. After placement of a urinary catheter, about 600 cc of haematic urine is evacuated, the patient presented analytical improvement with normalization of renal function.

An IV pyelography was performed to inspect the urinary tract. It revealed normal nephrogram and pyelogram phases, bilateral ureteral and renal dilatation with the bilateral bladder diverticulum without reflux. CT showed a bilateral hutch diverticulum with thickening of the right lateral wall of the bladder (Fig. 1).

The Cystoscopy evaluation revealed a bilateral diverticulum (Fig. 2) and both ureteral orifice was inside the each diverticulum (Hutch diverticulum), and superficial tumor of the right side wall.

We decided on conservative management and followed up with our patient after endoscopic resection bladder tumour and the opening of the diverticulum neck. We left a ureteral catheter along the ureters to relieve the hydronephrosis.

At the 6-month follow-up visit, the patient had no lower urinary tract symptoms or UTI and his urinary ultrasound was normal. The ureteral stent was removed.

Discussion

Hutch diverticulum is a congenital entity infrequent that develops in or near the ureteral hiatus and is accompanied by reflux in most cases.[3]

In 1961 Hutch described two types of diverticula in the ureteral hiatus.[3]

Primary: Found in smooth-walled bladders, appear isolated without other diverticula are intermittent and they are found in children without

* Corresponding author. Urology Department, CHU Ibn Rochd, Casablanca, Morocco.
E-mail address: rkik.mustapha@gmail.com (M. Rkik).

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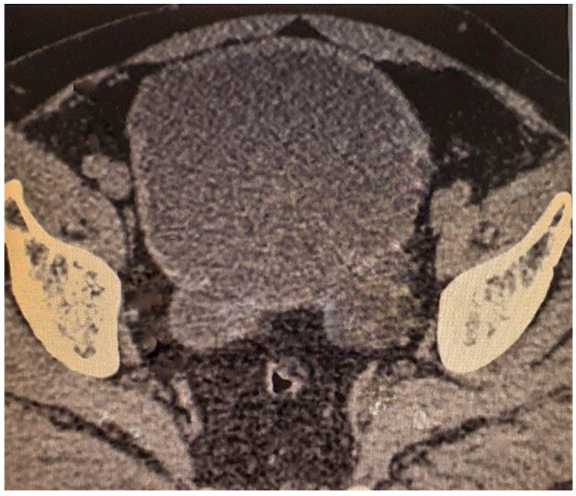

Fig. 1. A computed tomography scan of bilateral hutch diverticulum.

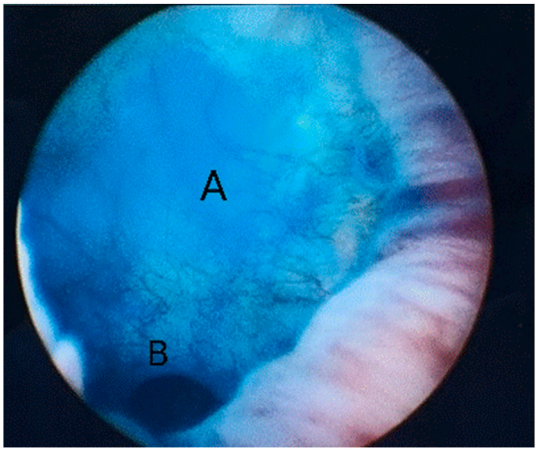

Fig. 2. Endoscopy image in which shows the ureteral meatus inside diverticulum; A) Diverticulum, B) Right meatus.

the presence of infravesical obstructive pathology.[3]

Secondary: They are found as multiple lesions in Trabeculated bladders are always present and are caused by infravesical obstruction.[3]

In theory, in its pathophysiology there is the intrinsic weakness of the bladder walls, a primary defect at the level of Waldeyer's fascia in children with diseases such as Ehler-Danlos, or Menkes.[4,5] Hutch diverticulum is a congenital disease and extremely rare in adult, only accounting for about 3% occurrence worldwide. It can be asymptomatic and accidentally found, as in our case, or may have diverse symptoms and complication due to obstruction or voiding dysfunction, urinary retention inside the diverticulum, stone formation, diverticulum rupture, and rarely it can be in association with cancer (<5%), due to the chronic irritation of the mucosa.[1]

Treatment will depend fundamentally on the symptoms and/or anatomical alterations produced. Based on literature review, both surgical and conservative measures are feasible to be the initial therapeutic modalities for hutch diverticulum. Indications for operation are typically large diverticula with complications of incomplete emptying, spontaneous rupture, and vesico-ureteral reflux mostly with children or suspicious malignant changes.[1]

In our case, we decided on conservative management and followed up with our patient after the opening of the diverticulum neck.

Conclusion

Hutch bladder diverticula are very rare in adulthood and mostly secondary to bladder outlet obstruction. We report a very rare entity of congenital bladder diverticulum (CBD) in an adult.Most CBD are small and asymptomatic; they are managed conservatively with follow-up, unless patient develops complications due to voiding dysfunction, which then warrants surgical intervention.

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