



## A CURIOUS CASE OF URETERIC DIVERTICULUM MIMICKING URETERIC INJURY FOLLOWING ROAD TRAFFIC ACCIDENT

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**ABSTRACT** Ureteral diverticulum is a rare urological condition with only 45 cases described in the literature. We present a 52 yr old male with polytrauma following road traffic accident who presented to our emergency department. After initial stabilisation and further evaluation he was found to have multiple solid organ injury and suspected lower ureteric injury due to contrast extravasation mimicking ureteric injury. On evaluation by Retrograde pyelogram diagnosis of lower ureteric diverticulum was confirmed. In conclusion Ureteral diverticulum may present as an incidental finding or with a secondary complication. Conservative management is advocated in the literature for non-complicated cases. Retrograde pyelography is the diagnostic tool of choice.

**KEYWORDS :** retrograde pyelogram; ureteric diverticulum

### Introduction

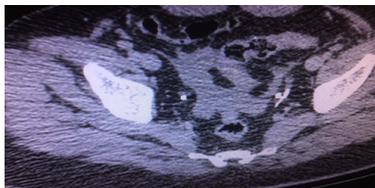
Ureteral diverticulum is a rare urological condition with only 45 cases described in the literature<sup>1</sup>. These previously reported cases vary in their presentation, diagnosis and management and there is no consensus in the literature on the best diagnostic tool available. We describe our experience on diagnosing and managing this condition in one of our patients and provide a descriptive review of the current literature on ureteral diverticulum.

### Case Report

A 52 yr old male presented to our emergency department, with polytrauma following road traffic accident. On initial stabilisation and evaluation he was found to have grade 4 splenic injury, chest injury, facio-maxillary fractures and suspected lower ureteric injury.

On further evaluation for lower uretic injury patient underwent Retrograde Pyelography, which showed ureteric diverticulum. Other injuries were treated by consulting respective specialities.

**Figure 1 :** CT - Contrast showing extravasation mimicking ureteric injury.



### Discussion

Ureteric diverticulum is a very rare condition which is usually asymptomatic. It may be serendipitously discovered.

Ureteric diverticulum can be classified into

1. Abortive ureteral duplication (disordered ureteral organogenesis).
2. True congenital diverticulum with all three ureteral layers
3. Acquired diverticulum with only mucosal herniation<sup>2</sup>.

Radiological imaging is the mainstay of diagnosis among the reported cases. Ultrasonography was initially advocated by Wan et al<sup>3</sup>. CT is generally used in symptomatic cases<sup>4</sup>. However, the sensitivity of CT in picking diverticulum may be debatable. We used pyelography to confirm the diagnosis.

Majority of patients with diverticulum do not require treatment<sup>5</sup>. Treatment is initiated in diverticulum associated with obstruction<sup>6</sup>. Diverticulectomy with segmental resection of the ureteric diverticulum with end to end anastomosis is currently advocated in cases where the urine refluxes and stagnates causing obstruction and urinary tract infection.

In our case as it was an incidentally detected ureteric diverticulum and patient was asymptomatic, he was managed conservatively. General prognosis of untreated, uncomplicated ureteric diverticulum is excellent<sup>7</sup>. A lower ureteric diverticulum can get complicated by perforation or Transitional cell carcinoma<sup>8</sup>. Douglas et al reported on patients who developed hydronephrosis secondary to ureteric diverticulum and were treated with surgical excision<sup>9</sup>.

### Conclusion

Ureteral diverticulum may present as an incidental finding or with a secondary complication. Conservative management is advocated in the literature for non-complicated cases. Retrograde pyelography is our diagnostic tool of choice.

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