

A Case Report On Horseshoe Kidney with Single Ureter

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Abstract

The Horseshoe kidney is not uncommon entity with an incidence of 0.25% of general population with increased association of genitourinary anomalies. Horseshoe kidney with single ureter is extremely rare. We report a case of a patient with a Horseshoe kidney with a single ureter with stone that was diagnosed incidentally.

Introduction:

Horseshoe kidney is the most common of all fusion congenital abnormality resulted from the fusion of the inferior poles of the developing right and left metanephric blastema to appear as an isthmus and occurs in 1 per 400 people (0.25%) with the male female ratio of 2:1^{1*}. Most patients with horseshoe kidney are asymptomatic, up to 80% have hydronephrosis, about 20% develop renal calculi and 1/3-1/2 of cases have another associated anomaly^{2*}. Associated extra-urinary anomalies have been described such as situs inversus totalis, and congenital scoliosis. Horseshoe kidney with only a single ureter is a rare anomaly. The aim of this report is to highlight its rarity. This case report describes the incidental diagnosis of a horseshoe kidney with a single ureter with stone in it.

Case report:

Mr. Stive Philip Rozario 27 years old male presented to Apollo Hospitals Dhaka with the complaints of Pain in the lower abdomen with Nausea, Hematuria (3-4 episodes) for 6 months, Vomiting 5 times for 2 days. No fever, no burning micturition, He was evaluated

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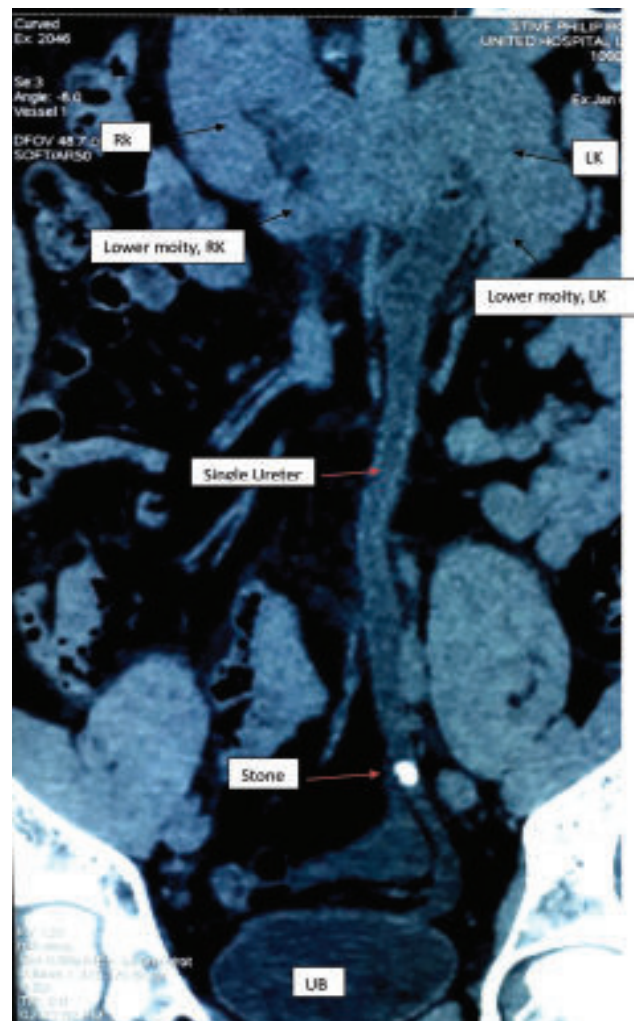


Fig-1: Horseshoe Kidney with Single Ureter with Stone in Ureter

thoroughly with relevant investigations. He was normotensive, non-Diabetic. S. Creatinine 4.18 mg/dl. NCCT scan of KUB- Horse-shoe Kidney with left sided single ureter with impacted stone in the lower part of ureter. With all preparation he underwent Urethrocystoscopy and RGP with RIRS with DJ stenting under SAB on 10.01.2019. Findings - EUM, Urethra, Prostate, Urinary Bladder neck - Normal, Interior of bladder-there was no right ureteric orifice anywhere in bladder or urethra, Left ureteric orifice normal in shape & position, mucosa of bladder - normal. RGP shows dilated right PCS is connected with left lower calyx.

Discussion:

Horseshoe kidney is the commonest of all renal fusion anomalies. It is usually asymptomatic, but the affected individuals are prone to a variety of complications, such as stone disease, pelviureteric junction obstruction, trauma, infections and tumors. As a result of the abnormal anatomy, imaging and treatment vary substantially from that of the normal kidneys.³ Horseshoe kidney with a single ureter is a rare anomaly.

The aetiology of the malformation is unknown. Associated extra-urinary anomalies have been described, such as pyelic fusion and crossed single ureter.¹

We report a rare case of a patient with a horseshoe kidney with a single ureter on the left side of vertebral column ending into urinary bladder at the left end of inter ureteric ridge. Patient was diagnosed incidentally and remained asymptomatic after one year of follow-up.

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