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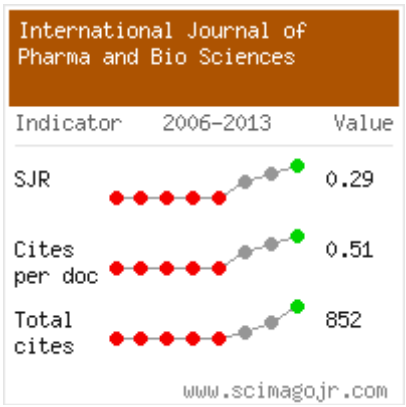

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Int J Pharm Bio Sci 2015 Oct ; 6(4): (P) 335 - 339

Case Report **Medicine**

International Journal of Pharma and Bio Sciences

ISSN 0975-6299

CROSSED RENAL ECTOPIA WITH CHRONIC KIDNEY DISEASE

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ABSTRACT

An ectopic kidney is an abnormal localization of a kidney due to a developmental anomaly and it occurs as a result of a halt in the migration of the kidneys to their normal locations during the embryonic period. The asymptomatic, non-complicated cases were mostly managed conservatively, but nephrectomy may be necessary if there are untreatable complications such as stones, infection or trauma. Development of chronic kidney disease in renal ectopia is uncommon. Here we present a case of crossed ectopic kidney in a patient who developed chronic kidney disease.

KEY WORDS: **Ectopic kidney, Crossed Ectopia, Chronic kidney disease**

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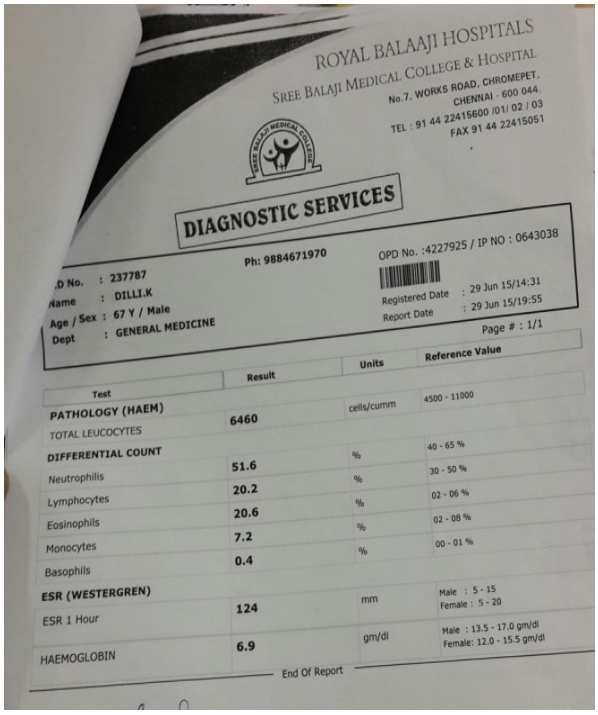
INTRODUCTION

An ectopic kidney is described as an abnormal presence of a kidney due to a developmental anomaly and it occurs as a result of a halt in the migration of the kidneys to their normal locations during the embryonic period[1]. The incidence of an ectopic kidney, 1 normal and 1 pelvic kidney is approximately 1:900[2]. It may be on the same side as the ureteral orifice (simple ectopia) but it may occasionally cross over (crossed ectopia). The renal ectopia may present a diagnostic problem when an acute disease develops in the kidney and there is always a danger of complication[1]. Here we present a case of a crossed renal ectopia with stage 5 chronic kidney disease.

CASE REPORT

A 67 year old male presented with a history of fever for 1 month which was intermittent, low grade with no history of evening rise of temperature. History of cough with expectoration for one month, with whitish mucoid sputum. History of nausea, generalized body pain, loss of appetite and loss of weight for a month .No other co morbidities. He was a full term, normal weight baby with no history of birth asphyxia or renal failure in the perinatal period and with a normal motor development. On physical examination, he was conscious, oriented, and febrile, thin built and pale. His pulse rate was 84/min and blood pressure was 102/60mm of Hg. His BMI was 21.9. Investigations revealed- Urine albumin-++, S.urea-89mg/dl, S.creatinine-6.3 mg/dl, Hb-6.9 g/dl. S. Na-139meq/l, K-4.75meq/l, chloride 107.4Uric acid -7.0mg/dl Ca-9mg/dl, Po4 - 5mg/dl. Serum iron 76 ug/dl. TIBC - 159 ug/dl. Serum ferritin -205 ng/ml. PTH - 54.75 pg/ml Peripheral smear revealed reduced red cell mass with predominantly normocytic. normochromic RBC's and occasional microcytic hypo chromic RBCs. EGFR-9 /min/1.73m2.



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.D No. : 237787
Name : DILLI.K
Age / Sex : 67 Y / Male
Dept : GENERAL MEDICINE

Registered Date : 29 Jun 15/14:31
Report Date : 29 Jun 15/19:55

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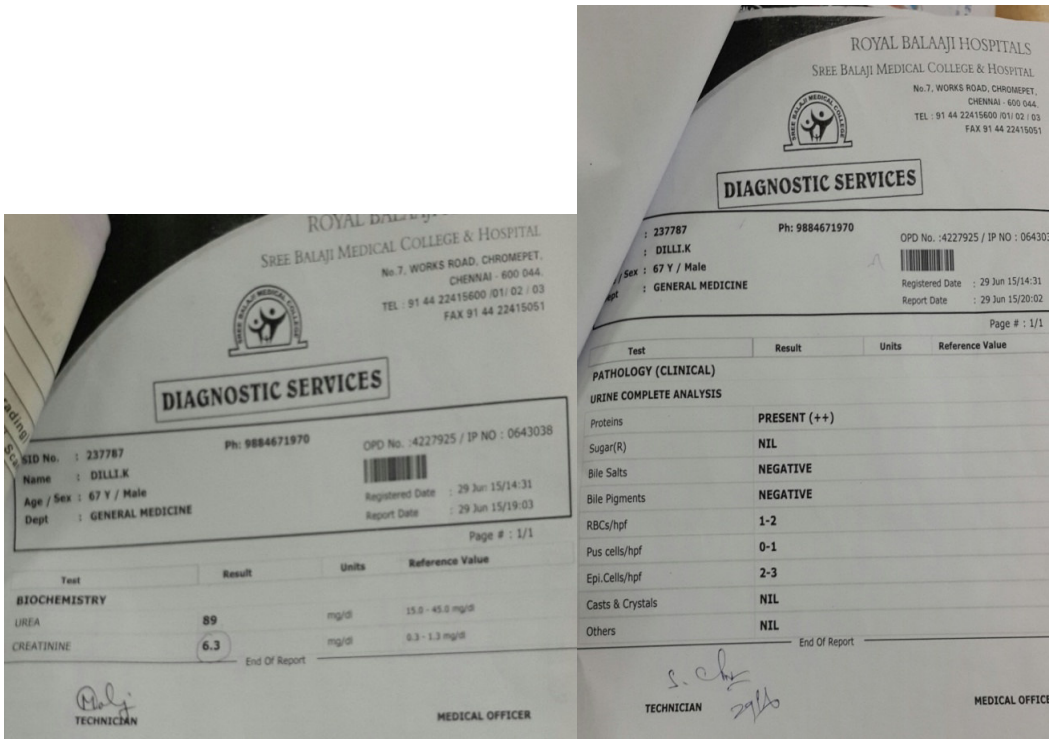
Test	Result	Units	Reference Value
PATHOLOGY (HAEM)			
TOTAL LEUCOCYTES	6460	cells/cumm	4500 - 11000
DIFFERENTIAL COUNT			
Neutrophilis	51.6	%	40 - 65 %
Lymphocytes	20.2	%	30 - 50 %
Eosinophils	20.6	%	02 - 06 %
Monocytes	7.2	%	02 - 08 %
Basophils	0.4	%	00 - 01 %
ESR (WESTERGREN)			
ESR 1 Hour	124	mm	Male : 5 - 15 Female : 5 - 20
HAEMOGLOBIN	6.9	gm/dl	Male : 13.5 - 17.0 gm/dl Female: 12.0 - 15.5 gm/dl

End Of Report



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Dept : GENERAL MEDICINE
OPD No. :4227925 / IP NO : 0643038
Registered Date : 29 Jun 15/14:31
Report Date : 29 Jun 15/19:03
Page # : 1/1

Test	Result	Units	Reference Value
BIOCHEMISTRY			
UREA	89	mg/dl	15.0 - 45.0 mg/dl
CREATININE	6.3	mg/dl	0.3 - 1.3 mg/dl

End Of Report

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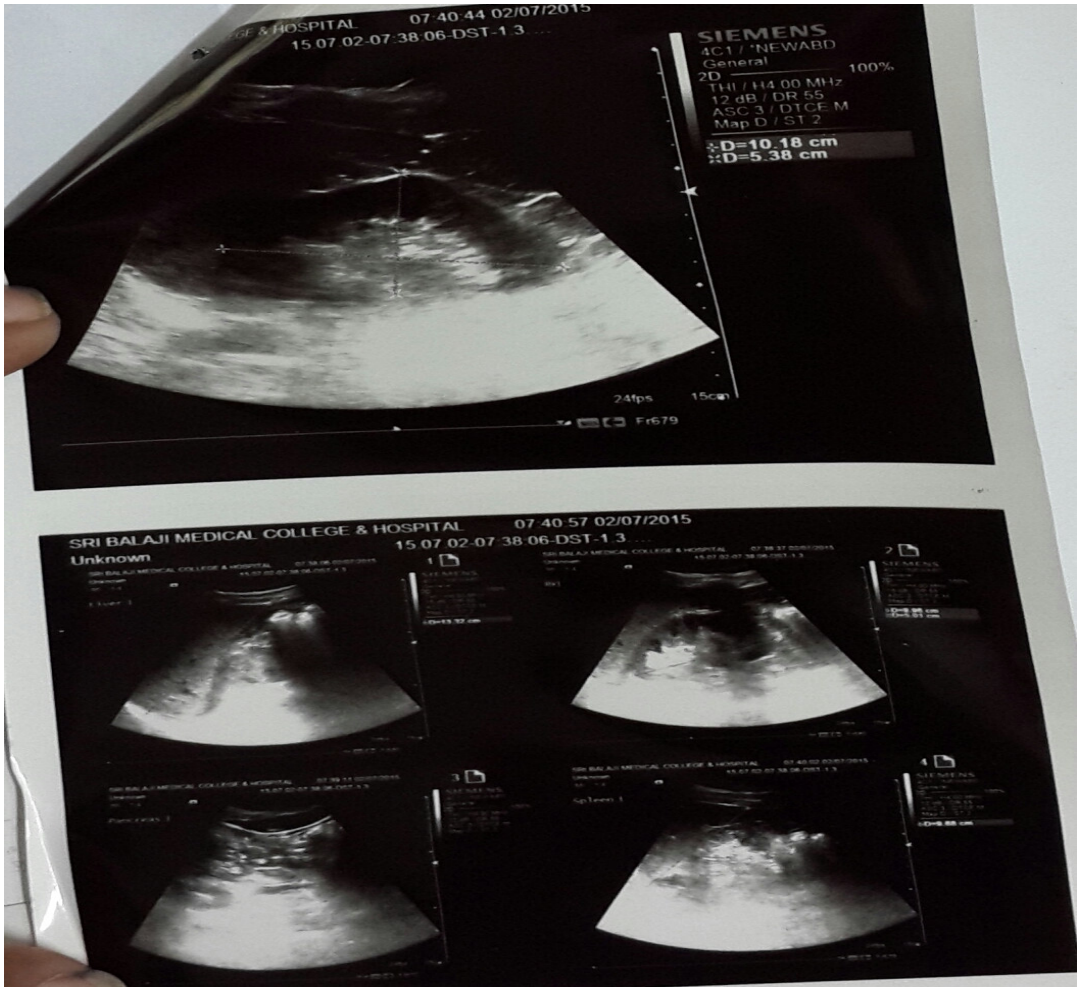
: DILLI.K
Sex : 67 Y / Male
: GENERAL MEDICINE
OPD No. :4227925 / IP NO : 064303
Registered Date : 29 Jun 15/14:31
Report Date : 29 Jun 15/20:02
Page # : 1/1

Test	Result	Units	Reference Value
PATHOLOGY (CLINICAL)			
URINE COMPLETE ANALYSIS			
Proteins	PRESENT (++)		
Sugar(R)	NIL		
Bile Salts	NEGATIVE		
Bile Pigments	NEGATIVE		
RBCs/hpf	1-2		
Pus cells/hpf	0-1		
Epi.Cells/hpf	2-3		
Casts & Crystals	NIL		
Others	NIL		

End Of Report

TECHNICIAN MEDICAL OFFICE



Ultrasonography of his abdomen showed an empty right renal fossa, with the kidney in the left lumbar region appearing malrotated and of size 10.8 x 5.2 cm with left kidney measuring about 9.4x5.0 cm. It was superficially placed with a hyper echoic cortical texture and a loss of corticomedullary differentiation. Associated cholilithiasis was present. Patient was managed symptomatically and was given supportive medication. Patient is on regular follow ups and is being prepared for hemodialysis.

DISCUSSION

Renal ectopia or ectopic kidney describes a kidney that is not located in its usual position[3]. It results from the kidney failing to ascend from its origin in the true pelvis or from a superiorly ascended kidney located in the thorax. Ectopic kidney has a reported frequency of 1:500 to 1:110.Ectopic thoracic kidney 1:13000; solitary kidney 1:1000; solitary pelvic kidney 1:22000; one normal and one pelvic kidney 1:3000; and crossed renal ectopia 1:7000[4]. Associated congenital anomalies like pulmonary agenesis, dextrocardia, sternal defects[5], multi-cystic dysplasia in a fused or an unfused crossed kidney[6,7] ureterocoele, a patent urachus[8]hydronephrosis, an ectopic ureteric orifice, a vesicoureteric reflux, hypospadias etc can also be found. Agenesis of the contralateral kidney has also been reported[9, 10, 11] An ectopic kidney may be asymptomatic and may function normally, even though it is not in its usual position. Sometimes, it may cause abdominal pain or urinary problems. When a kidney is out of its normal position, urine may get trapped in the ureter or in the kidney itself. The urine that remains in the urinary tract gives bacteria a chance to grow and spread. One ectopic kidney, even when it has no function, usually will not land in renal failure if the other kidney is normal. Renal failure occurs only when both the kidneys are damaged. The treatment options vary with the presence of symptoms or the complications. If the urinary function is normal, with no evidence of urinary tract blockage, no treatment is needed for the ectopic kidney. If an extensive renal damage has occurred, nephrectomy is indicated. Renal vascular abnormalities abound in patients with renal ectopia. This may range from very rare conditions, like entrapment of the renal artery by the diaphragmatic crura to possession of multiple aberrant arteries, to the more common stenosis of the renal vessels due to plaque deposition.

CONCLUSION

On diagnosis of solitary ectopic kidney, patients should be advised to follow at regular intervals for early diagnosis of any complication. In case renal biopsy is indicated, it may have to be an open biopsy. Once renal impairment sets in, the progression of renal failure may be expected to be faster in these cases.

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