**Spectrum of Congenital Anomalies of the Kidney and Urinary Tract in children**

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**Abstract**

**Background:** Congenital anomalies of the kidney and urinary tract comprise a wide range of structural malformations that result from defects in the morphogenesis of the kidney and/or urinary tract

**Aim of Study:** Study the types of renal anomalies. Study their clinical presentations, age of presentation, way of diagnosis, and complications.

**Patients and Methods:** A descriptive study was conducted from 1st January 2015 till 1st January 2016. Patients were collected from 4 pediatric nephrology centers. Data included: age of diagnosis, type of renal anomaly, radiological methods of diagnosis, clinical presentation and associated complications, family history of congenital anomalies and consanguinity.

Thorough physical examination was done to all children. Investigations send were Blood urea, Serum creatinine , urinalysis, urine culture, imaging study were documented.

**Results:**In this study 160 patients were included. Males were more affected than females 1.54:1. Most of the patients diagnosed at >1- ≤ 5 age group, 78 patients (48.8%). Most of the patients had negative family history, 124 (77.5%), and most of their parents were not consanguine (58.1%). Vesicoureteral reflux (VUR) was the commonest anomaly detected in 67 patients (41.9%), followed by Renal agenesis in 24 patients (15.0%).

Abdominal Ultrasound was the commonest radiological method used for diagnosis in 152patients (95.0%), followed by voiding cystourethrogram (VCUG) in 80 patients (50.0%).

Urinary symptoms were most common presentation in 93patients (58.1%). A higher complication was UTI (62.5%).

**Conclusion:** The commonest renal anomaly was VUR, followed by Renal agenesis, then PUJ, These renal anomalies were mostly diagnosed at >1-≤ 5 age group. Males exceeded the number of females, and the majority of patients were diagnosed initially by ultrasound

Most common presentation was urinary symptoms. The most prominent complication was UTI