

Screening Practices for Müllerian Anomalies in Patients with Known Renal or Urologic
Anomalies: A Retrospective Chart Review

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ABSTRACT

Introduction/Background: Approximately 20 to 40% of females diagnosed with renal anomalies will have a coexistent Müllerian anomaly. Müllerian anomalies can have significant implications on reproductive health, however, no formal guidelines exist to direct screening practices for patients within this high-risk population.

Objective: This study aims to establish a baseline incidence and description of pelvic imaging practices among female patients with renal anomalies at a tertiary children's hospital.

Methods: Retrospective chart review of female patients aged 0-25 years with congenital renal anomalies who presented to a tertiary children's hospital between January 2015 and June 2022.

Results: A total of 212 patients met inclusion criteria. The most common congenital renal anomaly diagnoses included multicystic kidney disease (61, 28.8%), renal agenesis (39, 18.4%), and renal dysplasia/hypoplasia (36, 17.0%). The average age of renal anomaly diagnosis was 8.6 years (SD = 5.8, range 0-20). Within this patient population, 125 (59.0%) received at least one pelvic imaging study and 75 (35.4%) reported an evaluation of reproductive structures. The most common imaging modality that evaluated reproductive structures was pelvic ultrasound (59/75, 78.7%), which occurred on average at age 13.7 (SD 4.7). Uterine or vaginal anomalies were identified in 22/75 (29.3%) patients who had their reproductive anatomy evaluated on imaging. Only one imaging study was ordered for the indication of Müllerian anomaly screening.

Discussion: Most female patients with renal anomalies do not receive imaging that evaluates reproductive anatomy. When imaging does occur, it is ordered for indications other than screening for Müllerian anomalies. Screening protocols should be considered for early detection of Müllerian anomalies.

Conclusions: Findings demonstrate that female patients with renal anomalies are not consistently screened for Müllerian anomalies despite the known association between these anomalies.