

Screening for Mullerian Anomalies in Patients with known Renal Anomalies

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Background

- + The association between Mullerian anomalies (MAs) and renal anomalies (RAs) is well documented; of women diagnosed with RAs, 20-40% also have a coexistent Mullerian anomaly.^{1,2,3}
- + Currently no formal guidelines exist to direct MA screening for female patients with known renal anomalies, potentially leading to greater delays in diagnosis of MAs in this population.
- + The purpose of this study is to establish a baseline rate of pelvic imaging practices in women with known RAs at a tertiary children's hospital.

Methods

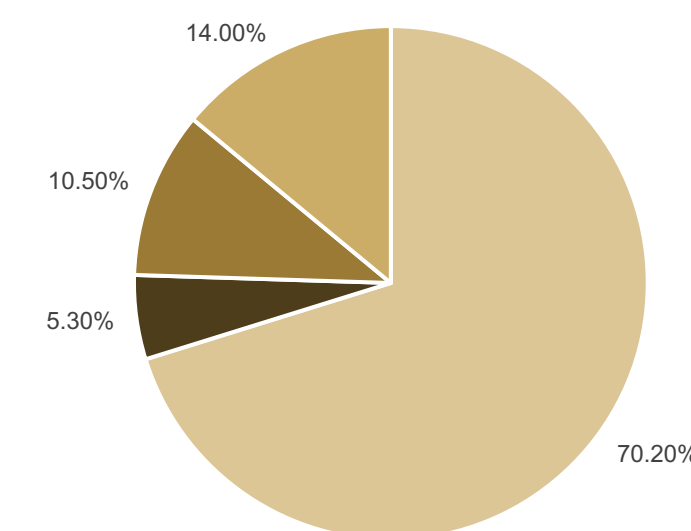
- + **Study Design:** Retrospective chart review
- + **Sample:** Female patients age's 0-25 with congenital renal anomalies who presented to a tertiary children's hospital between January 2015 and June 2022.
- + **Analysis:** Descriptive statistics were calculated for continuous variables using means and ranges.

Results

Table 1: Patient Characteristics	n=212 (%)
Characteristic	n=(%)
Patient Race	
American Indian or Alaskan Native	1 (0.5%)
Asian	4 (1.9%)
Black or African American	10 (4.7%)
White	130 (61.3%)
More than one race	18 (8.5%)
Other	41 (19.3%)
Not Specified	8 (3.8%)
Patient Ethnicity	
Hispanic or Latino	84 (39.6%)
Not Hispanic or Latino	128 (60.4%)
Insurance Status	
Public	122 (56.5%)
Private	89 (42.0%)
None/Self-Paid	2 (0.9%)
Renal Anomaly Diagnosis	
Renal Agenesis	39 (18.4%)
Renal Dysplasia or Hypoplasia	35 (14.4%)
Multi-Cystic Kidney Disease	60 (27.8%)
Duplicated Collecting System	12 (5.6%)
Pelvic Kidney	1 (0.5%)
Horseshoe Kidney	29 (13.7%)
Other congenital renal anomaly	28 (13.2%)
Multiple	6 (2.8%)
Age in Years of Renal Anomaly Diagnosis	
Prenatal Diagnosis	46 (21.7%)
Postnatal Diagnosis	166 (78.3)
0-10	93 (56.02)
11+	73 (43.98)
Mean Age of Postnatal Diagnosis	8.6 (Range 0-20)

Table 2: Imaging	n=(%)
Characteristic	n=(%)
Any Pelvic Imaging Evaluating Uterine Anatomy	
Yes	72 (34.0%)
No	139 (65.6%)
Mean Age in Years of Mullerian Anomaly Diagnosis	9.39 (Range: 1-16)

Anatomical Ultrasound Findings



■ Normal Uterus Confirmed ■ Vaginal Anomaly ■ Uterine Anomaly ■ Uterine Anomaly + Vaginal Anomaly

- + Only one imaging study was ordered with the indication of screening for a Mullerian anomaly
- + The remaining studies were ordered for other indications such as pelvic pain, abnormal bleeding, and renal surveillance
- + These studies were ordered by:
 - + Emergency department (22, 30.6%)
 - + Gynecology (16, 22.2%)
 - + Primary care (14, 19.4%)
 - + Urology (4, 5.6%)
 - + Other subspecialties (15, 20.8%).

Conclusions

- + These findings suggest that most patients with renal anomalies have not undergone pelvic imaging to evaluate for Mullerian anomalies.
- + Almost all imaging studies that evaluated reproductive anatomy were ordered for indications other than screening for Mullerian anomalies.

Implications

- + Mullerian anomalies may be left undiagnosed or diagnosed later in life given lack of screening guidelines for women with known RAs.
- + There is a need for education and screening guidelines to increase screening for women with known RAs.
- + Education and screening guidelines are being planned with the goal of increasing screening for Mullerian anomalies in patients with known renal anomalies.

References

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