

Heminephrectomy vs. Ureteroureterostomy: Surgeon Preference can safely be used for Management of Duplicated Kidneys with an Upper Pole Obstruction

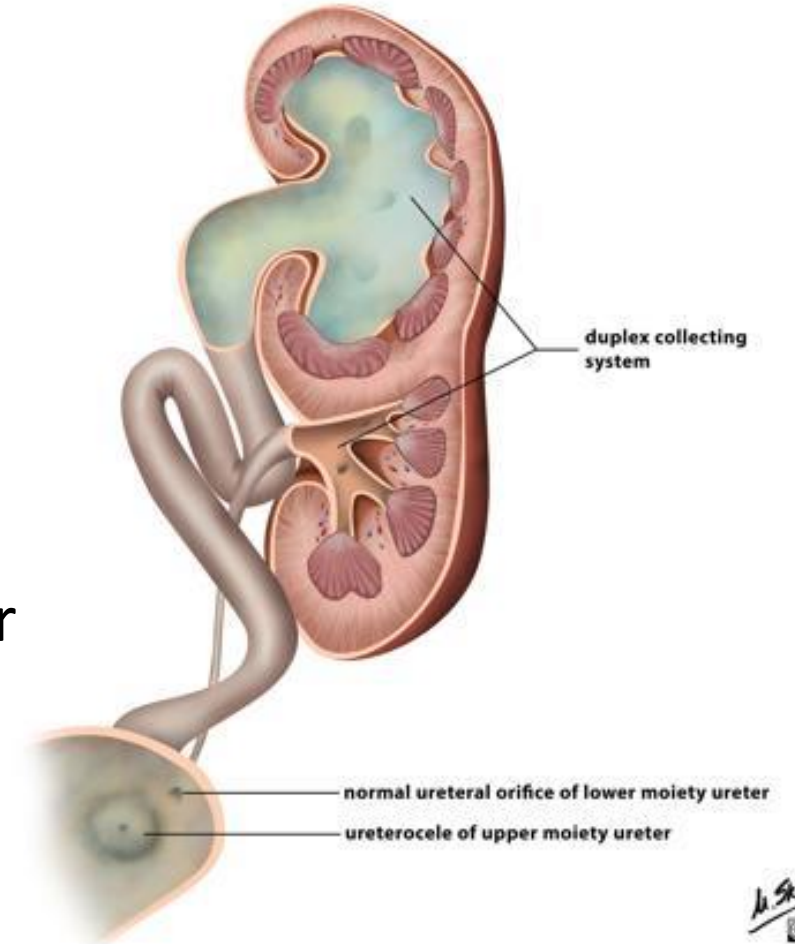
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Introduction

- Upper pole heminephrectomy (HN) and ureteroureterostomy (UU) are both viable options for an obstructing ureterocele in a duplex system
- Retrospective review of PHIS database from 2004-2018 of patients with a duplicated system + congenital ureterocele/cecoureterocele who underwent HN or UU
- Objective to determine if either approach yields superior patient outcomes
- Hypothesize that neither HN nor UU is superior with respect to postoperative complications or outcomes



Patient Demographics

	HN	UU	p value
Number of patients	66 (15.9%)	350 (84.1%)	
Female	74.20%	78.60%	0.431
Age (months)	15.5	14.8	0.6702
Race			0.208
White	30 (45.5%)	184 (52.6%)	
Black	5 (7.6%)	14 (4%)	
Asian	2 (1.7%)	6 (3%)	
Other	29 (44%)	146 (41.7%)	

Included ICD-9/10 Codes

Duplex Kidney: 753.4/ Q62.5

Ureterocele/Cecoureterocele: 753.23/ Q62.31, Q62.32

Heminephrectomy: 55.4/0T1XXXX/0TBXXXX

Ureteroureterostomy: 56.75/OTTXXXX

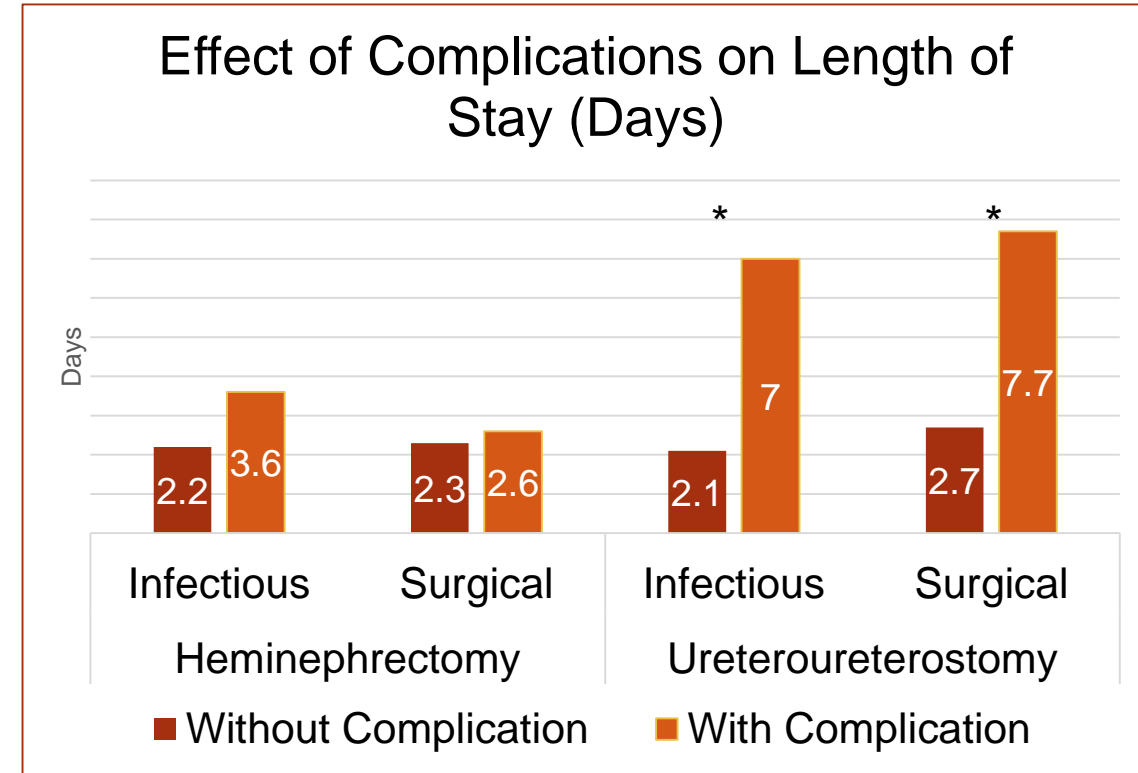
Admission Characteristics

	HN	UU	p value
Surgical Approach (n=52)*	9	43	0.397
Open	7 (88.4%)	38 (77.8%)	
Minimally Invasive	2 (11.7%)	5 (22.2%)	
Admission Type			<0.001
Inpatient	62 (93.9%)	244 (69.7%)	
Ambulatory Surgery	0 (0%)	70 (20%)	
Observation Unit	4 (6.1%)	36 (10.3%)	

*Surgical Approach was only reported consistently in ICD10 Coding (2015-2018)

Patient Outcomes

	HN	UU	p value
Length of hospital stay (days)	2.4	2.9	0.3982
Complications			
Infectious	7 (10.6%)	54 (15.4%)	0.275
Surgical	3 (4.3%)	15 (4.5%)	0.888
Readmission	11 (16.7%)	85 (24.4%)	0.169



Conclusions

- Our retrospective review failed to demonstrate a superiority of HN or UU for management of ureterocele in an obstructed duplex system
- Infectious and surgical complications have a greater impact on LOS following UU, as opposed to HN, where such complications have no significant effect