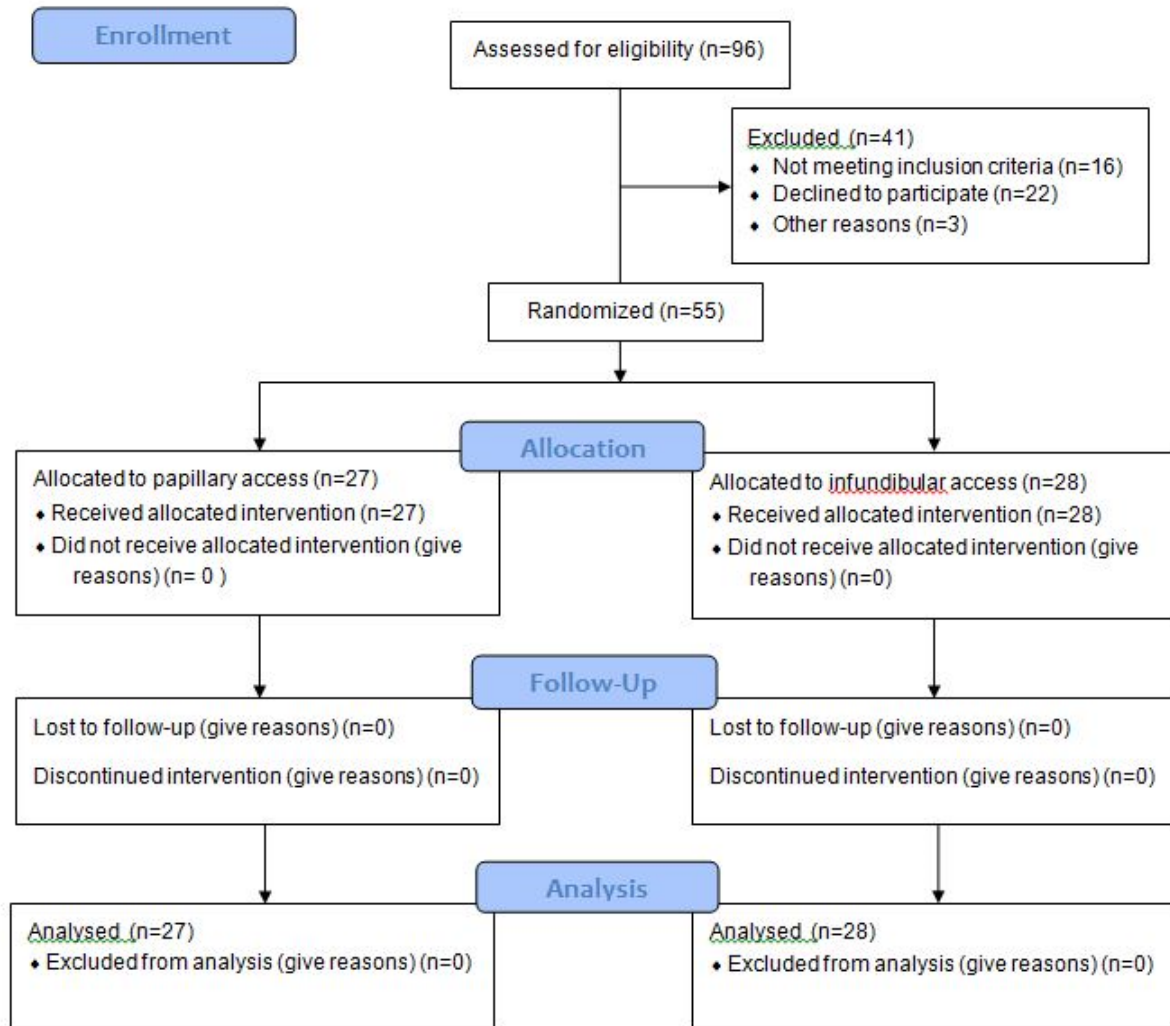


1. Participant Flow

Figure 1 | Flow diagram of the recruitment process



2. Baseline Characteristics

Patient demographics and operative data

	Group 1 – papillary puncture n=27	Group 2 –infundibular puncture n=28	p value
PATIENT DEMOGRAPHICS			
Age, years	58.11±12.72	53.68±14.29	0.23
Gender, M/F, no.	19/8	11/17	
BMI, kg/m ²	25.83±2.89	26.07±2.63	0.567
Stone size – maximal diameter, mm	14.25±5.82	14.86±6.6	0.788
Number of stones treated	50	44	
Side, R/L, no.	15/12	7/21	
Stone location- extension:			
Upper calyx	5	2	
Middle calyx	4	6	
Lower calyx	20	15	
Pelvis	21	21	

Numerical values are presented as mean values±standard deviation. M=male, F=female, BMI=body mass index, R=right, L=left

3. Outcome Measures

Outcome measures: Peri-operative outcomes

	Group 1 – papillary puncture n=27	Group 2 –infundibular puncture n=28	p value
OPERATIVE DATA			
Operative time, min	51.97±16.1	43.21±12.38	0.027
Fluroscopy time, sec	131.3±43.55	122.6±29.23	0.389
Single/Multiple access (percentage of multiple access cases)	23/4 (14.8%)	28/0 (0%)	0.051
Puncture site:			
Upper calyx	3	1	
Middle calyx	16	26	
Lower calyx	12	1	
Use of flexible nephroscopy for stone removal	10	4	0.068
Malecot tube (24Fr)	27	28	
Nephrostomy tube (16Fr)	4	0	
Use of Hemostatics	6	6	

Numerical values are presented as mean values±standard deviation. M=male, F=female, BMI=body mass index, R=right, L=left

Outcome measures: Postoperative outcome

	Group 1 – papillary puncture n=27	Group 2 –infundibular puncture n=28	p value
Stone free, no/percentage	25/92.5	27/96.4	0.604
Hemoglobin loss, g/L	1.54±1.29	1.35±0.79	0.916
Transfusion (number of patients)	0/27	1/28	1
Creatinine change, mg/dL	-0.04±0.23	0.04±0.25	0.887
Hospital stay, days	5.57±1.70	5.80±2.56	0.793

Numerical values are presented as mean values±standard deviation. KUB=kidney-ureter-bladder x-ray, CT= computed tomography nonenhanced. SWL=shock wave lithotripsy

4. Adverse Events

Complications

	Group 1 – papillary puncture	Group 2 –infundibular puncture	p value
Transfusion	1/27 (3.4%)	0/28 (0%)	0.49
Complication No/Treatment/Grading			
Hematuria	-	1/ resolved conservatively/II	
Fever	-	1/ Prolonged antibiotics/II	
Pseudoaneurysm	1/Angiographic embolization/IIIa	-	
Hemothorax	1/Drainage of the collection/IIIa	-	
Overall complications (percentage)	2/27 (7.4%)	2/28 (7.14%)	1
All complications were noted within 4 weeks from surgery. At the 3 month follow-up no complications were noted.			