



Outcomes of Percutaneous Nephrolithotomy: A Single Institutional Experience of 556 cases over 5 years

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Introduction

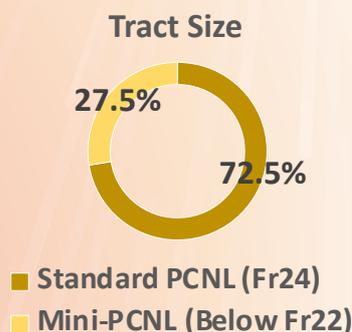
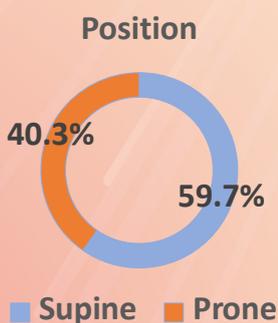
- Our unit has a large amount of stone cases and perform PCNL in weekly basis
- To investigate on the clinical outcome and complications after PCNL in our unit over years

Patients & Method

- Retrospective study of 556 cases who had undergone supine or prone PCNL from October 2017 to June 2023
- Patient's demographic data, stone parameters, clinical outcomes and complications were analyzed
- Subgroup analysis was performed for Prone and Supine group
- 33 cases of 2nd look PCNL were excluded in analysis

Result

- Mean Age: 57.3 years (range 21-84)
- Male: Female = 299:224
- Mean Stone size: 2.72cm (range 1-9.5)
- Guy's Stone score:
 - 1-2: 342 patients (65.4%)
 - 3-4: 181 patients (34.6%)
- Mode of Anaesthesia:
 - General Anaesthesia: 385 cases (73.6%)
 - Combined Spinal-Epidural Anaesthesia: 138 cases (26.4%)
- Operative Position and Tract Size:

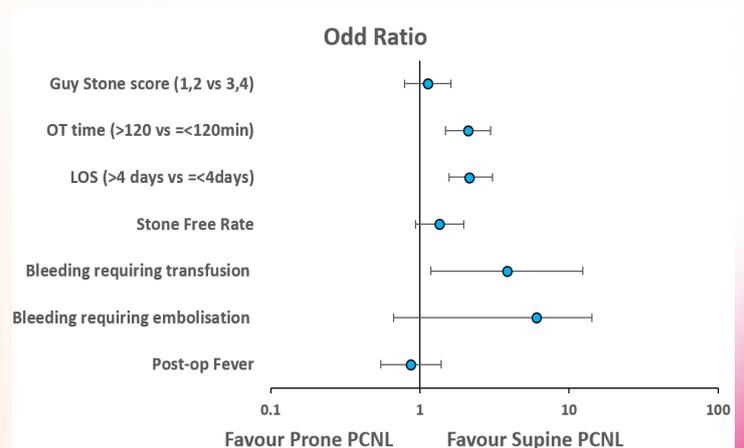


Result

- Mean Operative time (min): 116 (range 33-259)
- Median Length of Stay (days): 4 (range 1-90; IQR=4)
- Overall Stone Free Rate: 72.5%

SFR	Supine	Prone	P value
Overall	75%	68.8%	0.121
Guy's 1-2	85.0%	81.5%	0.387
Guy's 3-4	54.5%	47.5%	0.352

- Complications Rate:
 - Bleeding requiring transfusion: 2.48%
 - Bleeding requiring embolization: 0.9%
 - Fever: 15.7%
 - Drainage of perinephric collection: 0.19%
 - Pleural injury and Mortality: 0%
- Subgroup Analysis (Supine vs Prone PCNL)



Conclusion

- Both supine and prone PCNL has satisfactory stone-free rate with good safety profile
- Supine PCNL is superior to Prone PCNL with less operative time, shorter length of stay and less bleeding complication