

PP-055

Mini-PCNL for treatment of simple to stag horn and multiple kidney stones

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Aim of study: To study the outcome measures of MPCNL.

Methodology: This is the nonrandomized prospective study in 550 patients who underwent Mini-PCNL. Preliminarily 6 Fr ureteric catheters inserted retrogradely to opacify the PCS. Patients then positioned prone. 18 gauge 20 cm needle used to make initial puncture once the contrast is pushed retrogradely. The usual puncture was made through the mid calyx. Once the entry into the system confirmed by the fluid efflux then 0.038 guidewire passed ahead under fluoroscopic guidance.

A nick incision of about 5mm from the side of the needle. The tract was gradually dilated serially upto 18Fr. 8.5/11.5Fr semirigid ureteroscope used which has 6.5Fr working channel. Stone fragmentation carried out by pneumatic lithotripter. In a parallel or angulated PCS, either saline push method or additional tract created. Pulsatile pressurized irrigation pump (MMC Guangzhou, China) used to have clear vision and flush stones out.

Results: The Mean age was 38 years with M: F 60% to 40%. Mean weight was 58 Kg. There were 68 % simple stones, 17% staghorn, 15% semi-staghorn. 42% were solitary 58% multiple. The mean difference of pre and postoperative PCV was 1.8 ± 0.7 ($p=0.17$). Procedural time was 55 ± 37 minutes. Clearance rate 97 % in the first sitting. 96 % had no nephrostomy tube. The mean hospital stay was 3 days. 78 % of cases had puncture via middle calyx. 17 patients (3.09%) had postoperative transfusion. 11 patients had postoperative SIRS.

Conclusion: Mini PCNL can be employed for treatment of simple to staghorn as well as multiple kidney stones with high clearance rate (97%).

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