

PP-030

PCNL in horse shoe kidneys; prone, supine, bull's eye or parallax method – Does it matter?

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Objective: To review the Kidney Centre's experience of PCNL in horse shoe kidneys with different approaches.

Methods: Between January 2001 and January 2012 we performed PCNL in 19 horse shoe kidneys in which one patient had bilateral renal calculi. Percutaneous puncture was made with 15 patients in prone position and 4 patients in supine position. In all patients in supine position parallax method was used and on the other hand in prone position, parallax method was used in 8 patients and bull's eye method in 7 patients. Their ages ranged between 14 to 52 years with a mean age of 34.4 years. Our mean stone size was 5.09 cm² (Range 1.5-14 cm²). PCNL access tract was made in upper pole of the kidney in 14 while 3 had mid pole and 2 had lower pole access.

Results: Stone clearance after primary PCNL was achieved in 14 patients. Of the remaining 5 patients, 2 underwent secondary PCNL via the same tract and subsequently complete stone clearance was rendered, while the remaining 3 patients required ESWL sessions (single in 1 and 3 in 2 patients) for residual stones and became stone free. Mean hospital stay of our patients was 4.8 days (Range 3-8 days). No major complications were seen in our patients.

Conclusion: PCNL in horse shoe kidneys can be performed in prone as well as supine position with parallax and bull's eye methods with equal efficacy in terms of stone clearance and safety. However, pelvicalyceal systems with multiple stones may require ancillary procedure. It is felt, flexible nephroscope can be helpful in improving clearance in systems with multiple stones.

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