P068 Does type of post PCNL nephrostomy tube impacts pain and blood loss?

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Introduction & Objectives: To evaluate the effect of nephrostomy tube type on postoperative pain and blood loss as assessed by hemoglobin drop.

Materials & Methods: After departmental review and ethical review approval, we prospectively studied adult patients (16 to 65 years) who underwent unilateral PCNL using 26Fr Amplatz and single tract access. Patients who had nephrostomy with balloon (12Fr Foley's catheter) were compared with patients who had nephrostomy without balloon (12Fr Nelaton™ catheter). STONE Nephrolithometry score was used to assess the stone complexity. Mean pain score at 6 and 24 hours and mean Hemoglobin drop at 24 hours was compared between 2 groups using independent sample t-test, p-value of <0.05 was considered significant.

Results: From July 2017 to June 2018 198 PCNL were performed out of which 119 were included for analysis. Among those 66 had nephrostomy tube with balloon and 53 had nephrostomy tube without balloon. Mean STONE score (9.66±1.4 vs. 9.64±1.24) and operative time (72.84±28.34 vs. 86.05±32.1 minutes) was similar in both groups. Mean postoperative pain score at 6 hrs and 24 hrs was significantly lower in balloon group as compared to without balloon group [4.76±0.81 vs. 5.24±0.97 (p=0.04)] and [2.26±0.91 vs. 2.69±1.06 (p=0.020)]. Mean Hemoglobin drop was similar in both groups [1.08±0.7 vs. 1.14±-0.69 g/dl (p=0.60)]. Three patients required blood transfusion in balloon group and 1 patient in without balloon group.

Conclusions: Our study supports the use of nephrostomy tube with balloon(Foley's catheter) after PCNL as this is associated with less pain and comparable Hb drop as compare to nephrostomy tube without balloon. Further randomized controlled trails are needed to compare both the tubes.