

Considerations before changing ambulatory percutaneous nephrolithotomy practices

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In this month's paper by Hosier et al, authors found no difference in complication and stone-free rates between standard and extended patient selection criteria (including: age >75 years old, body mass index (BMI) >30 kg/m², American Society of Anesthesiologists (ASA) score >2, bilateral stones, solitary kidney, transplant kidney, complete staghorn calculi, stone burden >40 mm, multiple tracts, or prior nephrostomy tubes/stents), leading them to conclude that previous exclusion criteria for ambulatory percutaneous nephrolithotomy (aPCNL) are not strictly necessary.¹

In the COVID-19 era and with the current nursing staffing crisis faced by many hospitals in Canada,² we have witnessed immense pressures on our healthcare systems, especially when it comes to elective inpatient surgical care. Adoption of aPCNL and extended criteria aPCNL could be a means of tackling our ever-growing waitlists and decreasing pressures on inpatient surgical volume while providing costs savings to our system.³ Despite its retrospective nature — an acknowledged limitation — Hosier et al's study adds important information to the body of literature on safety of aPCNL and shows that criteria for aPCNL may need to be reconsidered.

An unanswered question I have is: how many patients were admitted unexpectedly from the recovery room? The authors report on re-admission rates, which were the same between the study groups, but they do not report how many patients required inpatient stay due to intraoperative or postoperative issues and were thus excluded from the study. A relatively low number of PCNLs are reported here over a 10-year time frame (average of 12 per year). How many inpatient PCNLs were done over the study time frame? The importance of unexpected admissions in today's era cannot be overstated. At times, even 1–2 unplanned admissions can create gridlock for the operating rooms and create unexpected surgical cancellations. If we know the “conversion rate” from aPCNL to standard PCNL, and for patients with extended criteria for aPCNL, it could help with surgical flow planning.

Another question is whether this study was powered sufficiently to identify specific groups that may not be appro-

priate for extended criteria aPCNL. Blood transfusions and higher Clavien-Dindo grade complications are infrequent for experienced surgeons and this study may be underpowered to assess these complications. In addition, many readers may be interested to know which extended selection criteria may be more important predictors of more serious postoperative complications. Most of the extended criteria patients were based on BMI (54%) or ASA classification >2 (55%). Complete staghorn calculi, multiple tracts, older age, and other criteria are relatively under-represented in this study. The mean age of the study groups was relatively young at 54 and 58 years for standard and extended criteria groups, respectively. Speaking from personal experience, most of my higher-grade complications are within those under-represented categories — especially octogenarian patients.

This is somewhat tongue-in-cheek, but my final question is: how is the surgeon's sleep quality when he/she performs aPCNL on an extended criteria patient? For those of us who have not adopted aPCNL, I think a major limiting factor is concern about a potentially catastrophic complication happening at home that could lead to significant morbidity and potential mortality. Although it would be somewhat unlikely such a complication would not present itself in the recovery room prior to discharge after a PCNL, an overnight stay (and subsequent morning blood work and hemoglobin level) certainly helps me sleep better at night.

Competing interests: The author does not report any competing personal or financial interests related to this work.

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