Peer Review File

Article information: http://dx.doi.org/10.21037/tau-20-1060.

Review Comments

Q1: What are the selection criteria for Day-surgery semi tubeless UMP? Is there any basis or literature support?

R1: Thank you for your comments. The selection criteria for Day-surgery semi tubeless UMP were mainly with the aspects of anesthesia and stone size. On the one hand, for anesthesiologists, patients need to meet the following conditions: ASA grade ≤ 2; WHO performance status ≤ 2; no coronary heart disease (CHD)；age is not allowed more than 75 years old. On the other hand, although there are opinions that the size of the stone is best to be between 1 and 2 cm, the included stone size is between 1cm and 3cm. It should be noted that staghorn calculi more than 3 cm are excluded. In the actual clinical practice, because our doctor has 1000 cases of PCNL operation experience, so for some stones more than 2cm, also included in the day-surgery standard. The selection criteria for Day-surgery semi tubeless UMP were mentioned in the section on Clinical data. (see Page 3 line 10-17)

Q2: UMP should be added to analyze the safety and feasibility of day surgery for the treatment of kidney stones.

R2: Thank you for your comments. On this point, I have described it in detail in the discussion section. Is your opinion asking me to move this part forward?

Q3: A comparative analysis with the conventional inpatient surgery group should be added, which may be more meaningful.

R3: Thank you for your suggestion. UMP has been carried out as routine day surgery in our hospital and rarely as the conventional inpatient surgery. Therefore, it is very rare in our hospital to include patients with UMP indications into the conventional inpatient surgery group. So far, it is difficult to find comparative cases. But this is indeed a good suggestion.

Q4: It is recommended to add the research on patient satisfaction scores and medical expenses.

R4：Thank you for your suggestions. Actually, our hospital has carried on the satisfaction survey to all the inpatients. But this satisfaction survey is not mandatory. Some patients have even been discharged from the hospital without giving us a score sheet. Generally speaking, all UMP patients in our urology center are in hospital for just one day, PCNL or m-PCNL patients need to be hospitalized for a longer period of time. So, in terms of medical expenses, UMP is much lower than PCNL.

Q5: The number of patient samples in this study is too small, and a large sample study should be added for verification.

R5: Thank you for your comments. This study is a retrospective study, 358 patients are all patients who meet the criteria. In order to make the research results more reliable, our urology center is also conducting a single-center prospective study.

Q6: Is there a study on the long-term stone removal rate?

R6: CT scan was routinely performed on the first day and one month after surgery. We have added some content to the RESULT section: According to the definition of residual stone above 3mm, the CT scan on the first day after the operation showed that the stone-free rate was 91.62% (328/358) and the CT scan after one month after the operation showed that the stone-free rate was 94.69% (339/358). (see Page 7 line 9-12)

Q7: There are many uncertainties in retrospective research, which increase the deviation of research results. How to explain and solve this problem?

R7: Thanks for your comments. Although this study is a retrospective study, our urological center has established an electronic database of clinical data of patients, which records the inpatient data in detail. Therefore, it has high accuracy for the retrospective data.

Q8: The introduction is too simple. Many researches on kidney stones and ultra-mini percutaneous nephrolithotomy are not involved in the introduction of this paper. It is suggested to supplement relevant information.

R8: Thank you for your suggestions! According to these suggestions, we have added some content to the introduction section.

"For this reason, in 2013, Desai et al] introduced the ultramini-PNL (UMP), in which a 6 Fr mini nephroscope is used through a 11/13 Fr metal sheath and stones are fragmented with a laser. At present, the size standard for UMP treatment of kidney stones has not been clearly defined, and it is generally considered to be between 1-2cm. This mainly considers that complications are related to operation time. But for experienced surgeons, 2-3cm stones can also be done well." (see Page 2 line 12-18)