Reviewer's report

Title: Robot-assisted laparoendoscopic single-site surgery for the simultaneous management of multiple urinary tract calculi: a case report and experience sharing

Version: 0 Date: 26 Nov 2019

Reviewer: Daniele Castellani

Reviewer's report:

Thank you very much for asking me to review this case report. The authors report their experience in treating simultaneously multiple bladder, ureteral e pelvic stones with a single-site robotic system. Robotic surgery is gaining popularity in several fields of urology, despite its high costs, because of its minimal invasiveness. However, I have some concerns.

a. Case presentation.

- The patient's stone burden, particularly in the pelvis and in the ureter, should be better explained to choose the suitable treatments. The authors should report the number, size e location of each stone correctly. I can see one ureteral stone and 3 caliceal stones. Is that correct?

- Furthermore, we have no data regarding the Hounsfield unit of pelvic and ureteral stone. Were the stone radiolucent or not? Could have the stones be suitable for oral dissolution?

- The preoperative CT scan showed grade III-IV hydronephrosis, with poor residual parenchyma. Why was preoperative upper tract drainage not performed, followed by MAG-scan to understand the function of the right kidney? In the case of very poor function, nephrectomy could have been a better option.

b. Surgical procedure. The paragraph is too long, and the surgical steps (ureterolithotomy, pyelolithotomy, and cystolithotomy) are well known. It would be more interesting to have a short surgical clip instead of a lengthy description of the surgical steps (not longer than 5 minutes, supplementary file).

c. Results. The follow-up CT scan was performed 3-months after surgery (figure 4). Why was double J stent still in place? Was the stent left for such a long time?

d. Discussion. The authors stated that endoscopic surgery was not suitable in the present patient because it could have been difficult to clear all renal and ureteral stones in a single session. I disagree with them. Simultaneous treatment of renal and ureteral stones (ECIRS: Endoscopic Combined IntraRenal Surgery) has been demonstrated being feasible and safe, allowing tailoring of the procedure on the patient, the dynamic anatomy of the collecting system and the urolithiasis (see: Scoffone CM, Cracco CM. Invited
review: the tale of ECIRS (Endoscopic Combined IntraRenal Surgery) in the Galdakao-modified supine Valdivia position. Urolithiasis. 2018 Feb;46(1):115-123. doi: 10.1007/s00240-017-1015-9). ECIRS should have been considered an option in the present patient, and this should be better discussed in the paper. Bladder stone could have been treated by simple transurethral holmium laser lithotripsy. Therefore, a laparoscopic approach to the upper tract could have also been an option in this patient.

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