

First, our study was designed before publication of the *Recommendations for the Nomenclature of Cognitive Change Associated With Anaesthesia and Surgery—2018* by The Nomenclature Consensus Working Group.¹ The same applies for patient enrollment, data collection, and data analysis that have been completed before the publication of the new nomenclature. Therefore, the term “postoperative cognitive dysfunction (POCD)” is consistently used in the publication of our results.²

Second, we did not exclude patients with preoperative mood disorders. Screening was performed in order to detect preexisting depressive episodes for consideration in the statistical analysis. A score of 23 or less on the Mini-mental Status Examination was defined as dementia.³ Total scores on the Patient Health Questionnaire-9 and the Mini-mental Status Examination were compared between robot-assisted and open retropubic radical prostatectomy. In addition, scores were analyzed for a univariable association with early POCD (2018 nomenclature: “delayed neurocognitive recovery”). Our study aimed to analyze early postoperative neurocognitive function (“delayed neurocognitive recovery”) in a relatively healthy patient population with low perioperative risk and no preexisting neurodegenerative disease. This limits the generalizability of our results, which has been addressed in the publication of our study.²

Third, the aim of this trial was to compare early POCD before hospital discharge and self-assessed cognitive function at 3 months between robot-assisted and open retropubic radical prostatectomy. We agree with Hou et al that our study cannot answer the question of postoperative neurocognitive disorders 12 months after surgery. However, this was not the purpose of this prospective trial.

Finally, as mentioned above, our study was designed before the new nomenclature for perioperative neurocognitive disorders was published in November 2018.¹ We cannot refer to the term “delayed postoperative neurocognitive disorders,” which has been suggested by Hou et al, since our study protocol used a definition of POCD that had been suggested prior to the 2018 nomenclature.⁴ The current definition and nomenclature did not exist at the time of study design, patient enrollment, and data collection. Importantly, the term “delayed postoperative neurocognitive disorders,” suggested by Hou et al, is not mentioned in the original publication of The Nomenclature Consensus Working Group.¹ It is crucial to differentiate between “delayed neurocognitive recovery,” which is defined as “cognitive decline diagnosed up to 30 days after the procedure” and “postoperative neurocognitive disorders,” defined as “cognitive decline diagnosed up to 12 months after the procedure.”¹

We fully agree with Hou et al that studies that have been designed after the publication of the current nomenclature should use the proposed terms for perioperative neurocognitive disorders and adhere to the definition as outlined by Evered et al.¹

References

1. Evered L, Silbert B, Knopman DS, et al. Recommendations for the nomenclature of cognitive change associated with anaesthesia and surgery-2018. *Anesth Analg*. 2018;127:1189–1195.
2. Beck S, Zins L, Holthusen C, et al. Comparison of cognitive function after robot-assisted prostatectomy and open retropubic radical prostatectomy: a prospective observational single-center study. *Urology*. 2020. <https://doi.org/10.1016/j.urology.2019.12.045>. In press.
3. Mitchell AJ. A meta-analysis of the accuracy of the mini-mental state examination in the detection of dementia and mild cognitive impairment. *J Psychiatr Res*. 2009;43:411–431.
4. Rasmussen LS, Larsen K, Houx P, et al. The assessment of postoperative cognitive function. *Acta Anaesthesiol Scand*. 2001;45:275–289.

<https://doi.org/10.1016/j.urology.2020.04.062>
UROLOGY 141: 181–182, 2020. © 2020 Elsevier Inc.

The Use of Captopril— Angiotensin Converting Enzyme (ACE) Inhibitor for Cystinuria During COVID-19 Pandemic



Cystinuria is rare condition affecting around 1:2000 people in United Kingdom but is a chronic condition and presents with recurrent urolithiasis requiring multiple surgical interventions. Studies in adult has demonstrated higher prevalence of hypertension, and renal impairment. Apart from increase fluid intake, alkalinisation of urine and lower salt intake, thiols medications are important second line preventative strategies. There has been issues with supply of both D-Penicillamine and tiopronin and captopril is an easily available drug. Captopril, is the first angiotensin-converting enzyme (ACE) inhibitors in the market and is the only ACE inhibitors that has sulfhydryl ligand that forms bond with cystine. Cystine-Captopril disulphide is 200 times more soluble than cystine and thus prevent stone formation. Captopril has demonstrated to improve blood pressure and protect renal function. Hence it could be used in patients with cystinuria and other comorbidities.¹

It has been suggested that use of ACE inhibitors may exacerbate symptoms in COVID-19 patients and have led to controversies.² The angiotensin-converting enzyme 2, an enzyme that physiologically counters the renin-angiotensin-aldosterone system activation but also functions as a receptor for COVID-19 virus and the COVID-19 S protein binds strongly to the ACE2 receptor.³ Guan et al reported hypertension and diabetes as most common comorbidities in patents admitted with COVID-19 infection, however, treatment with ACE inhibitors was not

evaluated separately.⁴ A recent paper reported that acute cardiac injury and heart failure in addition to the acute lung injury may be responsible for severe illness with a high mortality. Interestingly, mortality rate was almost similar in patients with or without history of hypertension.⁵ A sudden withdrawal of ACE inhibitors has been discouraged as this action may result in clinical instability. At present there is scarce data to support any change in practice.

Until further data are available, we should continue captopril to treat stone disease associated with cystinuria. This position is in line with other association and society guidance (Renal Association, UK and European Society of Cardiology).

**Chandra Shekhar Biyani,
Victor Palit, and
Sunil Daga**

*Department of Urology, St James's University Hospital,
Leeds, United Kingdom*

*Department of Nephrology, St James's University Hospital,
Leeds, United Kingdom*

E-mail: shekharbiyani@hotmail.com (C.S. Biyani).

References

1. Biyani C, Cartledge JJ. Cystinuria—diagnosis and management. *EAU-EBU Updates Ser.* 2006;4:175–183.
2. South A, Tomlinson L, Edmonston D, Hiremath W, Sparks M. Controversies of renin-angiotensin system inhibition during the COVID-19 pandemic. *Nat Rev Nephrol.* 2020. <https://doi.org/10.1038/s41581-020-0279-4>.
3. Tai W, He L, Zhang X, et al. Characterization of the receptor-binding domain (RBD) of 2019 novel coronavirus: implication for development of RBD protein as a viral attachment inhibitor and vaccine. *Cell Mol Immunol.* 2020. <https://doi.org/10.1038/s41423-020-0400-4>.
4. Guan W, Ni Z, Hu Y, et al. Clinical characteristics of coronavirus disease 2019 in China. *N Engl J Med.* 2020. <https://doi.org/10.1056/NEJMoa2002032>. 3. published online Feb 28.
5. Chen T, Wu D, Chen H, et al. Clinical characteristics of 113 deceased patients with coronavirus disease 2019: retrospective study. *BMJ.* 2020;368:m1091. <https://doi.org/10.1136/bmj.m1091>.

<https://doi.org/10.1016/j.urology.2020.04.057>
UROLOGY 141: 182–183, 2020. © 2020 Elsevier Inc.

Asymptomatic COVID-19 Infection in a Patient Evaluated for Ureteric Colic: Radiological Findings and Impact on Management



Dear Editor,

Though no specific urologic manifestations of COVID-19 are recognized, it is important that urologists be aware of potential asymptomatic infection in patients presenting with urologic pathology.

A 31-year old lady with a history of cystinuria presented to a UK hospital with isolated right loin pain. No respiratory symptoms, fever, or signs of sepsis were noted. She was assessed as a nonsuspected COVID-19 case and a noncontrast CT kidney, ureter, bladder (KUB) was arranged. The CT identified a distal 10 × 6 mm right ureteric stone causing hydronephrosis (Fig. 1A). At the base of her right lung, numerous foci of ground-glass appearances were noted, suggestive of COVID-19 (Fig. 1B). She was isolated on a COVID-19 ward and a ureteric stent was inserted under spinal anesthesia the following day with full personal protective equipment (PPE). Ureterscopy and stone fragmentation was not undertaken to reduce operative time, whilst spinal anesthesia avoided the need for ventilation with its attendant risks of respiratory compromise and aerosol generation. She was discharged the same evening with a plan for definitive stone surgery in several weeks' time. A subsequent nasopharyngeal swab test was positive for COVID-19 and she was instructed to self-isolate.

Although, common symptoms of COVID-19 include fever and dry cough, positive cases can be asymptomatic. Analysis of 112 positive cases from the “Diamond Princess” cruise ship revealed that 73% were asymptomatic, of whom 54% had lung opacities on CT.¹ PPE protocols vary widely, with some centers restricting PPE to those approaching suspected or confirmed cases only. Since COVID-19 may not give rise to respiratory symptoms or fever, a strong argument can be made that all those attending the emergency department or acute assessment units with other presenting complaints be assessed as “possible” cases until proven otherwise.

A proportion of asymptomatic COVID-19 patients are identified through investigation for other presenting complaints. A noncontrast CT KUB to investigate suspected ureteric colic will usually include the lung bases. In most situations, scan images are available prior to a radiologist report and clinical decision making is based upon self-reporting by urologists. It is therefore imperative that urologists pay close attention to ground-glass changes in the lung bases when interpreting a CT KUB to identify signs of COVID-19.

Non-steroidal anti-inflammatory steroids (NSAID) increase renal angiotensin-converting enzyme 2 receptors which are bound by severe acute respiratory syndrome-CoV-2, and are hypothesized to increase the risk of developing severe COVID-19.^{2,3} However, there is no convincing evidence that NSAIDs can worsen or increase the risk of COVID-19, and the WHO do not recommend against the use of NSAIDs of ureteric colic.⁴

Recent evidence suggests a high rate of postoperative mortality in COVID-19 patients undergoing surgery. In a study of 34 patients, postoperative intensive care admission was 44.1% and mortality rate was 20.5%. This was related to postoperative acute respiratory distress syndrome in 60.0%.⁵ This emphasizes the need for timely recognition of asymptomatic COVID-19 patients presenting with other pathology, so that as in presented case, surgical