## available at www.sciencedirect.com journal homepage: www.eu-openscience.europeanurology.com





## Letter to the Editor

Re: Patrick Lewicki, Spyridon P. Basourakos, Bashir Al Hussein Al Awamlh, et al. Estimating the Impact of COVID-19 on Urology: Data from a Large Nationwide Cohort. Eur Urol Open Sci 2021;25:52–6

Impact of the COVID-19 Pandemic on Kidney Stones: Matching Online Discussions to Real World Data

We read with great interest the data presented by Lewicki et al [1] regarding shifts in urology care during the COVID-19 pandemic. The authors report a nearly 20% decrease in urology emergency room visits during March 2020, with an estimated 23% decrease in volume for nonobstructing stones. They note that there were no significant predictors of change in inpatient volume, even when correcting for hospital academic status, urban/rural status, or insurance makeup, perhaps suggesting that patient-specific factors related to the pandemic are driving the changes in volume observed.

During the pandemic, we were similarly motivated to understand patient care trends with respect to the decrease in emergency room volumes observed, particularly for stone disease [2]. Using a digital ethnographic, mixedmethods approach, we used the popular social media discussion board Reddit to evaluate the impact of the pandemic on decision-making related to kidney stones on the r/KidneyStones subforum (www.reddit.com/r/ KidneyStones/). We designated posts as either pre-COVID (published January 1–February 29, 2020) or COVID (March 1-June 1, 2020). We applied classic thematic analysis and natural language processing methodology to identify drivers of kidney stone decision-making among patients on this forum. We found that the COVID cohort expressed a higher degree of anxiety surrounding in-person encounters and greater reluctance regarding procedural interventions, with many patients opting instead for at-home, conservative treatment beyond clinical guidelines, reserving emergency department visits for almost exclusively larger stones, highlighting a tendency to postpone consultations that might have serious long-term sequelae [3]. In fact, the mean stone size among those reporting visits to the emergency department increased from 5.1 to 10.5 mm.

The downstream impact on health care utilization caused by the pandemic remains an open question and one that is understudied because of the recency of the

COVID-19 pandemic. Lewicki et al [1] provide a valuable real-world insight that highlights the changes that many clinicians observed first-hand. Our study adds another dimension to these discussions by using a Big Data approach to assess drivers of patient decision-making.

Provided that telehealth is already an established mode for health care delivery after the outbreak of COVID-19, it will be interesting to see if these trends persist and in what way this adoption of telehealth and more widespread SARS-CoV-2 vaccination will shape the landscape of urology care.

**Conflicts of interest:** Sriram V. Eleswarapu is a consultant for Metuchen Pharmaceuticals. Tommy Jiang and Vadim Osadchiy have nothing to disclose.

## References

- [1] Lewicki P, Basourakos SP, Al Hussein Al Awamlh B, et al. Estimating the impact of COVID-19 on urology: data from a large nationwide cohort. Eur Urol Open Sci 2021;25:52–6.
- [2] Jiang T, Osadchiy V, Weinberger JM, et al. Impact of the COVID-19 pandemic on patient preferences and decision-making for symptomatic urolithiasis. J Endourol. In press. https://doi.org/10.1089/end.2020.1141.
- [3] Proietti S, Basulto-Martinez M, Pavia MP, Luciani L, Gaboardi F, Giusti G. Decision making and treatment options in endourology post-coronavirus disease 2019—adapting to the future. Curr Opin Urol 2021;31:109–14.

Tommy Jiang<sup>a,b</sup> Sriram V. Eleswarapu<sup>a,b</sup> Vadim Osadchiy<sup>a,b,\*</sup>

 <sup>a</sup>Division of Andrology, Department of Urology, David Geffen School of Medicine, University of California-Los Angeles, Los Angeles, CA, USA
<sup>b</sup>Consortium for Health Activity on Social Media, David Geffen School of Medicine, University of California-Los Angeles, Los Angeles, CA, USA

\*Corresponding author. Department of Urology, University of California-Los Angeles, 10945 Le Conte Avenue, Los Angeles, CA 90095, USA. Tel. +1 310 7943058; Fax: +1 310 2062369.

E-mail address: vosadchiy@mednet.ucla.edu (V. Osadchiy).

March 26, 2021

