



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

such as the blue dot or presence/absence of cremasteric reflex as clinical diagnostic adjuncts to distinguish between true testicular torsion and testicular appendage torsion. Current literature encourages the use of these physical exam findings given that the blue dot sign is pathognomonic for appendage torsion.

We applaud the authors on their inquisitiveness on this subject, as there is an unfortunate lack of literature in the diagnosis and treatment of testicular appendage torsion, necessitating the need for further studies in order to delineate the standard of care. Standardizing the operative technique for appendage torsion, by either routinely performing or not performing ipsilateral orchiopexy, would eliminate confusion in patients who re-present with symptoms on previously explored side. If orchiopexy is routinely performed on all patients undergoing exploration, it would eliminate the need for surgical re-exploration to rule out spermatic cord torsion upon re-presentation to the ED. However, if there is no true benefit to fixating the affected testicle in terms of rate of future spermatic cord torsion, violation of the physiologically normal testicle should be avoided.

Michaela Sljivich,  
Eric Bortnick, and  
Jeffrey Stock

Department of Urology, Mount Sinai Hospital, Icahn School  
of Medicine, New York, NY  
E-mail: [Michaela.sljivich@mountsinai.org](mailto:Michaela.sljivich@mountsinai.org) (M. Sljivich).

<https://doi.org/10.1016/j.urology.2020.05.060>  
UROLOGY 143: 271–272, 2020. © 2020 Elsevier Inc.

## Nondilated Obstructive Uropathy – Still Underappreciated



In a recent review of the differential diagnosis of acutely declining renal function, the discussant states: “the absence of hydronephrosis on renal ultrasonography rules out [urinary tract] obstruction.”<sup>1</sup> Many urologists and nephrologists believe this. But it is not true. I learned this the hard way 35 years ago when I evaluated an elderly man with three days of anuric renal failure. Renal ultrasonography showed no hydronephrosis, so I inferred parenchymal disease. To my surprise, a renal biopsy showed only interstitial edema and normal glomeruli. A colleague suggested nondilated obstruction.<sup>2</sup> Placement of a ureteral catheter led to a large diuresis and marked improvement in renal function.<sup>3</sup> Though uncommon, many similar cases of nondilated obstructive uropathy have been reported; most of these have involved elderly patients with cancer, retroperitoneal fibrosis, or pelvic surgery.<sup>2–5</sup> The cause of this phenomenon is unclear but seems related to ureteral pathology such as encasement by cancer or fibrosis, edema, or debris accumulation. Whatever the mechanism, the message is clear: the absence of

hydronephrosis does not exclude urinary tract obstruction; when the index of suspicion is high, obstructive uropathy should be pursued even if renal ultrasonography is normal.

Aaron Spital

Mount Sinai Morningside, New York, NY  
E-mail: [aspital@att.net](mailto:aspital@att.net) (A. Spital).

## References

1. Lundquist AL, Kalim S, Mojtahed A, Tomaszewski KJ. Case 13-2020: A 29-year-old man with high blood pressure, renal insufficiency, and hematuria. *N Engl J Med*. 2020;382:1639–1647.
2. Rascoff JH, Golden RA, Spinowitz BS, Charytan C. Nondilated obstructive nephropathy. *Arch Intern Med*. 1983;143:696–698.
3. Spital A, Valvo JR, Segal AJ. Nondilated obstructive uropathy. *Urology*. 1988;31:478–482.
4. Naidich JB, Rackson ME, Mossey RT, Stein HL. Nondilated obstructive uropathy: percutaneous nephrostomy performed to reverse renal failure. *Radiology*. 1986;160:653–657.
5. Onuigbo MAC, Lawrence K, Onuigbo NTC. Non-dilated obstructive uropathy – an unrecognized cause of acute renal failure in hospitalized US patients: three case reports seen over 6 months in a northwestern Wisconsin Nephrology practice. *Ren Fail*. 2010;32:1226–1229.

<https://doi.org/10.1016/j.urology.2020.05.039>  
UROLOGY 143: 272, 2020. © 2020 Elsevier Inc.

## Impact of the COVID-19 Pandemic on the Urology Residency Match in Singapore



To the Editor:

The COVID-19 pandemic has led to significant disruptions in undergraduate and postgraduate Urology education and training. In this letter, we examine the wide-ranging impact of the COVID-19 pandemic on the Urology Residency Match in Singapore, and share strategies to proactively mitigate these consequences.

## BACKGROUND TO SINGAPORE’S UROLOGY RESIDENCY MATCH

Urology Residency in Singapore is a 6-year program accredited by the Accreditation Council for Graduate Medical Education-International. Nationwide, there are 3 Sponsoring Institutions (SI) as training sites. Applicants are required to submit their Curriculum Vitae, Referee letters, and participate in Multiple Mini Interviews, conducted by the Ministry of Health.<sup>1</sup> Successful applicants are asked to rank their preference for a SI, and the 3 SIs will similarly rank the applicants. Potential residents are only allowed to apply in their second year after graduation, and have typically completed at least one formal postgraduate Urology clerkship.

## IMPACT OF THE COVID-19 PANDEMIC ON POTENTIAL RESIDENTS

Due to social distancing measures, medical student education has relied primarily on remote-teaching via video-conferencing platforms. Medical student electives have been cancelled. Valuable hands-on exposure to diverse Urologic procedures, known to significantly influence decisions to enter Urology residency,<sup>2</sup> have been lost. Due to manpower redistribution, doctors have been redeployed from Urology departments to frontline departments. Potential residents have faced difficulties securing clinical clerkships and electives in Urology. Even within Urology clerkships, potential residents have been confronted with reduced surgical exposure due to deferment of non-urgent surgeries. Local and international conferences and workshops, typically keenly attended by potential residents, have been cancelled. In Singapore, experiences during clinical clerkship, positive working environments, quality of education, and quality of mentorship have been found to be the most important factors influencing residency choices among applicants.<sup>3</sup> These factors are fundamentally related to the experiences of working and learning in the speciality of interest, and interacting with faculty and residents. These have been significantly disrupted and restricted by the pandemic. The feared eventual impact would be declining interests in Urology residency, and less-informed choices on preferred training sites. From the Program's perspective, the pandemic has undoubtedly limited first-hand opportunities to evaluate potential residents.

## STRATEGIES TO MITIGATE CONSEQUENCES

To guard against the detrimental effects of reduced Urology exposure,<sup>4</sup> core Urology curriculum for medical students was maintained via video-conferencing. Didactic teaching was deliberately modified to include more case-based learning, and a variety of Urology procedures was intentionally introduced to students, leveraging on online resources. Interns rotating through the Urology department were also actively engaged through hands-on exposure to various procedures. Potential residents and students who were unable to secure clerkships or electives were engaged in scholarly activities through research participation. Moving forward, we would strongly consider forming Urology Interest Groups, which have been shown

to be a significant positive predictor of Urology residency application.<sup>5</sup>

## CONCLUSION

With no clear end in sight for the COVID-19 pandemic, it is timely for Residency Programs worldwide to examine the impact on their respective Urology Residency Match Exercises, and proactively implement measures to mitigate these consequences for the foreseeable future.

## AUTHORS' CONTRIBUTIONS

Yi Quan Tan: Conceptualization, Writing - original draft. Gregory Pek: Conceptualization, Writing - review & editing. Ziting Wang: Conceptualization, Writing - review & editing. Ho Yee Tiong: Conceptualization, Writing - review & editing. Edmund Chiong: Conceptualization, Writing - review & editing, Supervision.

Yi Quan Tan,  
Xiang Wen Gregory Pek,  
Ziting Wang,  
Ho Yee Tiong, and  
Edmund Chiong

Department of Urology, National University Hospital,  
National University Health System, Singapore  
Department of Surgery, Yong Loo Lin School of Medicine,  
National University of Singapore (NUS), Singapore  
E-mail: [yi\\_quan\\_tan@nuhs.edu.sg](mailto:yi_quan_tan@nuhs.edu.sg) (Y.Q. Tan).

## References

1. Chong TT, Soo KC. General surgery (GS) residency selection process: a comparison between Singapore (Singhealth) and United States. *Ann Acad Med Singapore*. 2014;43:288–290.
2. Lebastchi AH, Khouri Jr RK, McLaren ID, et al. The urology applicant: an analysis of contemporary urology residency candidates. *Urology*. 2018;115:51–58.
3. Ng CL, Liu XD, Murali GR, et al. Factors affecting choice of sponsoring institution for residency among medical students in Singapore. *Singapore Med J*. 2018;59:642–646.
4. Slaughenhaupt B, Ogunyemi O, Giannopoulos M, et al. An update on the current status of medical student urology education in the United States. *Urology*. 2014;84:743–747.
5. Wong D, Ganesan V, Kuprasertkul I, et al. Reversing the decline in urology residency applications: an analysis of medical school factors critical to maintaining student interest. *Urology*. 2020;136:51–57.

<https://doi.org/10.1016/j.urology.2020.05.037>

UROLOGY 143: 272–273, 2020. © 2020 Elsevier Inc.