



Triaging Office-Based Urology Procedures During the COVID-19 Pandemic

The COVID-19 pandemic is placing an unprecedented strain on health care systems across the world. Hospitals and medical practices have been asked to acclimate to this ever-changing environment by diverting personnel and equipment to help with this crisis.¹

Within the outpatient setting the COVID-19 pandemic arouses the particular public health concerns of disease exposure and use of resources. An active clinic environment increases traffic on the hospital campus as well as potential exposure of patients and health care personnel; and it violates contamination strategies such as social distancing. This is especially troubling with the older urological patient population, which is at higher risk for complications from exposure to COVID-19. Furthermore, there are concerns about resource utilization, especially of personal protective equipment, as supply chains fail to meet demands in many health care settings.²

Indeed, every effort should be taken to keep our patients at home, and the rapid expansion of telehealth will allow for many outpatient evaluations to be completed virtually for the foreseeable future.³ While recent guidelines have provided a framework for determining which urology operations should be safely delayed, many questions remain with regard to triaging office-based procedures.⁴

As a representative collection of urologists from several institutions across the U.S., with expertise in different subspecialty fields of urology, we provide a framework to help triage office-based procedures during the COVID-19 pandemic. These recommendations are based on the expert opinion of the authors. They are not intended to be strict guidelines, and are not endorsed by any specific society or panel from the American Urological Association. Furthermore, approaches to all of these urological problems must be tailored to individual settings, personnel and resources; and must always incorporate

shared decision making between clinician and patient. The procedures evaluated are summarized in the Appendix.

Based on the best available data, recommendations are made as to which procedural evaluations should continue owing to diagnostic yield and risk of missed/delayed treatment. This is not meant to be a complete and exhaustive list; rather, it encompasses some of the most commonly performed procedures in the outpatient setting.

With regard to procedures targeted at the symptomatology of conditions, such as stress urinary incontinence (urethral bulking), interstitial cystitis (intravesical dimethyl sulfoxide instillation), lower urinary tract symptoms (UroLift®/Rezūm™), overactive bladder (intravesical Botox, percutaneous tibial nerve stimulation, peripheral nerve evaluation for InterStim), we believe these can safely be delayed for at least 3 to 6 months depending on individual settings, availability of resources and shared decision making.

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Appendix

Procedure	Indication	Recommendation	Comments
Diagnostic cystoscopy	Gross hematuria	Consider performing full evaluation without delay	Diagnostic yield in finding bladder cancer or upper tract malignancy is high in this group
	Microscopic hematuria with risk factors (smoking history, occupational/chemical exposure, irritative voiding symptoms)	Consider delaying evaluation up to 3 months unless patient is symptomatic	Diagnostic yield for urinary tract malignancy is increased in this setting compared to asymptomatic patients, especially when multiple risk factors are present
	Microscopic hematuria without risk factors	Delay evaluation for 3 months or longer as necessary.	Risk of urinary tract malignancy in a diverse patient cohort with asymptomatic microscopic hematuria is low
Surveillance cystoscopy	Assessment of response to treatment or surveillance of high risk nonmuscle invasive bladder cancer (NMIBC) within 6 months of initial diagnosis	Consider performing evaluation without delay	There is a high risk of recurrence and/or progression within the first 6 months of diagnosis
	Assessment of response to treatment or surveillance of high risk NMIBC beyond 6 months of initial diagnosis	Consider delaying evaluation up to 3 months	High risk patients with stable disease may be at lower risk for relapse
	Assessment of response to treatment or surveillance of low/intermediate risk NMIBC regardless of when diagnosis was made	Delay evaluation for 3-6 months	Tumor recurrence in this group is low
Induction intravesical bacillus-Calmette Guérin (BCG) chemotherapy	High risk or intermediate NMIBC	These patients should be prioritized for treatment, though they may also require a delay in therapy depending on local needs/resources	Induction intravesical therapy provides a significant benefit by reducing disease recurrence and progression
Maintenance intravesical BCG/chemotherapy	High risk NMIBC	Stop maintenance therapy and re-evaluate its use/need in 3 months	While maintenance therapy is important, the most significant benefit from intravesical treatment is likely during the induction course
Prostate biopsy	Intermediate risk NMIBC	Delay indefinitely	
	Risk factors for high risk prostate cancer, including prostate specific antigen (PSA) greater than 20, rapid PSA doubling time less than 6 months, digital rectal examination concerning for clinical T3 disease, and/or local or systemic symptoms	Attempt to obtain magnetic resonance imaging initially; delay biopsy up to 3 months; if performing biopsy, suggest transperineal biopsy, if possible, to minimize infectious risks and fecal exposure	Delay in diagnosis of high risk prostate cancer by 3 months is unlikely to change long-term oncologic outcome
	No risk factors for high risk prostate cancer and/or routine biopsy for established patients on active surveillance	Delay 3-6 months	Delay in diagnosis of intermediate risk prostate cancer by 3-6 months is unlikely to change long-term oncologic outcome
Androgen Deprivation Therapy	Prostate cancer	Delay 6-8 weeks	Delay in treatment is unlikely to change oncologic outcome or symptomatology
Cystoscopy and ureteral stent removal	Indwelling ureteral stent after ureteroscopy	Consider performing without delay	Risk of encrustation, urinary tract infections, ongoing symptoms requiring emergency room visit or hospital admission, retained/forgotten stent should be minimized.
Exchange of chronic Foley/suprapubic catheter	Indwelling catheter	Extend exchange intervals for additional 2-4 weeks if no history of encrusted catheter, difficult exchange, recurrent urinary tract infections	
Urodynamics	Evaluation of genitourinary tract dysfunction	Delay for 3-6 months	
Pessary cleaning/exchange	Stress urinary incontinence, pelvic organ prolapse	Delay for up to 3 months if no evidence of vaginal wall erosion or ulceration	Risk of rectovaginal or vesicovaginal fistula

REFERENCES

- World Health Organization. Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19). <https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf>. Accessed March 22, 2020.
- Centers for Disease Control and Prevention. Interim Guidance for Healthcare Facilities: Preparing for Community Transmission of COVID-19 in the United States. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-hcf.html>. Accessed March 22, 2020.
- Hollander JE and Carr BG. Virtually perfect? Telemedicine for Covid-19. *N Engl J Med*. <https://www.nejm.org/doi/full/10.1056/NEJMp2003539>. Accessed March 22, 2020.
- Stensland KD, Morgan TM, Moizadeh A et al: Consideration in the triage of urologic surgeries During the COVID-19 pandemic. *Eur Urol Epub*. <https://els-jbs-prod-cdn.jbs.elsevierhealth.com/pb/assets/raw/Health%20Advance/journals/eururo/EURUROL-D-20-00380-1584548684213.pdf>. Accessed March 15, 2020.