Urological Surgeries During Exit from National Lockdown During COVID-19 Pandemic

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Dear Editor In Chief

The first case of coronavirus disease (COVID-19) in India was reported on 30 January 2020 and the government declared a nationwide lockdown on 25 March 2020 [1]. However, a lockdown is not a cure and surgical management of non-COVID urologic illnesses cannot be indefinitely postponed [2]. Recommendations to restart surgical care are essential as the lockdown is eased.

Partial utilization of resources should initially be done to spare for a sudden increase in demand due to surge in cases. Surgeries that have been postponed once during lockdown (for 3 or 6 months) should not be re-postponed. Guidelines have previously proposed postponement of uro-oncologic surgeries by 3–6 months for small renal masses, low-risk nonmuscle invasive bladder cancer, low-risk upper tract urothelial cancers, low–high-risk localized prostate cancer, and early penile cancer [3, 4]. Analysis of our case load (unpublished) of oncologic surgeries and renal transplants performed during lockdown compared with a similar duration in 2019 showed a decline of 87.7% and 70.7% respectively (Fig. 1). Cancer care for patients previously postponed should reinstate. Key safety concerns include older age, increased comorbidities, complex nature of surgeries, and more complicated hospital stay [5]. Oncological patients should be encouraged to come forward for care and their scheduling done as per severity and urgency of their disease. Semi-

urgent live renal transplants like lack of secure vascular access and for those not doing well on dialysis should be allowed [6]. All precautions should be taken to reduce exposure of healthy donor in hospital during investigations [7]. Prolonged prohibition on renal transplantation is likely to have a significant adverse effect on quality of life and survival of recipients. Benign urologic conditions can be divided into three categories (Table 1), and may have significant detrimental effect on quality of life of patients. Unfortunately, this aspect of treatment has not been adequately addressed in studies.

While scheduling surgeries, a tiered system as proposed by us may be followed, so that patients who have been postponed once are able to get the required care (Table 1). Once planned for surgery, every patient should be screened for symptoms and tested for COVID-19. COVID-19-positive patients should be managed in a different dedicated ward and operation theatre or sent to a designated COVID-19 hospital. It should be realized that these tests have a high false negative rate (median 38% on the day of symptom onset), so a negative test should not relax use of adequate safety precautions by the doctors [8]. Duration of preoperative admission should be reduced to limit patient exposure. Informed written consent should be taken about potential risk of acquiring COVID-19 in the postoperative period before going ahead with surgery. During surgery, all internationally recommended precautions should be followed. Postoperative hospital stay should be minimized and follow-up may be done virtually. Proper medical record keeping should be ensured to avoid litigation. Absorbable skin sutures may be used wherever feasible. Drain or Foley's catheter may be removed at nearby clinic or home nursing facility to limit hospital visits.

In conclusion, routine urological surgical care may be restarted using a tiered surgical reopening plan and adequate precautions.

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Fig. 1 Case load performed during 6 weeks of lockdown (phases 1 and 2) at our institute in 2020 compared with that in a similar time period during the previous year (2019)

Table 1 Classification of benign urological conditions and proposed tiered system for scheduling urological surgeries in COVID-19 times

Classification of benign urological conditions in COVID-19 times	
Category	Examples
Emergent care required (may be immediately life threatening)	Obstructed ureteric stone with solitary kidney or urosepsis Urinary tract obstruction with obstructive uropathy Acute ischemia such as strangulated inguinal hernia/testicular torsion/para-phimosis Trauma with hemodynamic instability Blocked catheter
Immediate care not required	Infections such as infected prostheses/Fournier gangrene Staghorn stone with chronic renal dysfunction/infection
May later have detrimental effect on quality of life	Chronic ureteric stents
May require more complex treatment later if not done presently	Undescended testes Proximal hypospadias Ureteropelvic junction obstruction with possible renal deterioration Bladder outlet obstruction with retention managed temporarily with catheterization
Elective indication for treatment	Male infertility with advanced age of female partner Asymptomatic renal stones Hydrocele Isolated distal hypospadias Ureteropelvic junction obstruction with stable renal function Male infertility with young age of female partner
Proposed tiered system for scheduling urological surgeries	
Priority	Type of surgeries (examples)
Emergent/high/complex cases (first case on the list)	Non-deferrable cancers, renal transplants
Postponed oncology cases	TURBT, radical prostatectomy for carcinoma prostate, partial nephrectomy
Postponed benign cases	Orchidopexy, TURP, PCNL/URSL/RIRS, pyeloplasty, urethroplasty for patients on catheter
Postponed elective cases (only if resources and low regional COVID-19 case load permits)	Circumcision, hydrocele repair, surgery for small stones, functional urology cases

Compliance with Ethical Standards

Conflict of Interest The authors declare that they do not have any conflict of interest.

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