

## Urological practice in the era of covid-19

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### Abstract

This article describes how urologist and related hospitals should practice in the current situation of COVID-19. It describes the measures to be taken at various places in the hospital like OPDs, IPDs, registration area, waiting area, etc.

**Keywords:** Urology and COVID-19, Corona virus in urology, SARS-CoV-2 and urology

When this year started, no one has thought of what is currently on. All resolutions wished on the new year have come to halt. Nobody has thought of a pandemic, announced by WHO on 11 March 2020<sup>1</sup> will come and disrupt everything in the life of all of us. Unprecedentedly, we all are fighting with the deadly COVID-19 (SARS-CoV-2) virus, that causes acute respiratory distress syndrome. We, as doctors, have the responsibility to come in front during this war with the virus and take care of our patients, family members, society and the country as a whole. The current situation has overburdened our healthcare system. There is no ideal solution for this problem. Already the number of confirmed COVID-19 patients in India has crossed one million and more than 100 doctors have died at the time of writing this. This is a grave situation where we have to modify our surgical plans so that it further benefits the patients. As urologist, we deal with all age groups and especially the elder susceptible patients who are more prone to catch the disease of COVID-19. There is no direct effect of corona virus on the genitourinary tract from the urologist's perspective.<sup>2</sup> This does not mean that urologists should not be involved in the care of patients. It means that we should take a stepwise approach to minimize the patients from contracting the disease. Various guidelines have already been published by the Royal College of Surgeons,<sup>3</sup> American Urological Association,<sup>4</sup> Urological Society of Indias and so on. Here I will now just elaborate the different situations where we need to modify ourselves.

### The first and foremost is the social distancing

This should be strictly followed specially when attending emergency in the casualty, out patient department or while taking rounds of the admitted patients in the wards or emergency department. As much as possible try to restrict physical consultations to the emergency department visits only. And for routine consultations we should do telemedicine consultations as per the directions of the Government of India.<sup>6</sup> Infact, seeing the increasing number of patients and doctors being acquiring COVID-19, it is recommended to use personal protective equipment (PPE).<sup>7</sup>

In our hospital we have started practicing social distancing, use of personal protective gears and PPE in the outpatient department also (Fig 1-4). For the hospitalized patients one room one patient policy should be followed.



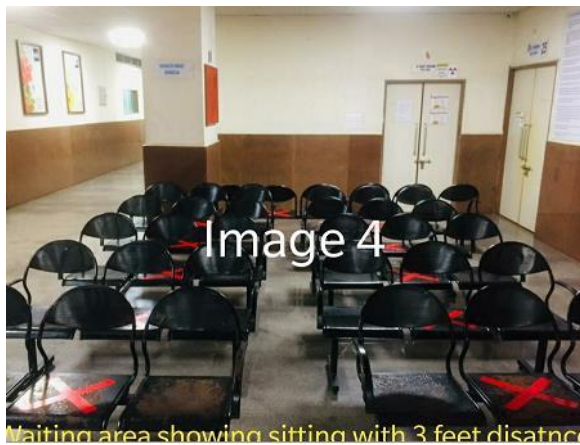
**Fig. 1:** Showing hospital entrance area with screening arrangements after wearing PPE



**Fig. 2:** Showing patient registration area with maintenance of proper distancing



**Fig. 3:** Showing OPD reception area



**Fig. 4:** Showing waiting area and sitting arrangement with 3 feet distance



**Fig. 5:** Showing consultant wearing PPE kit in the operating room

### Applying standard precautions

For all patients is next important thing. This includes hand hygiene, respiratory hygiene, use of personal protective

equipments (PPE), environmental hygiene and waste management.

### Preparation for surgeries

Taking utmost precautions during surgeries is the next important step. During urological surgeries we should follow the recommendations of WHO<sup>7</sup> and Urological Society of India (USI).<sup>5</sup> We should at this time do only emergency and semi-emergency surgeries only. Number of people should be low in the operating room. All members in the operating room should wear PPE. Urologist should try to avoid contact with urine using all protective measures (Fig 5), although, no cases of transmission through urine has been reported till now. But there is evidence RNA of SARS-CoV-2 RNA in the urine samples in few cases around 6.9%.<sup>8</sup> During open surgical procedures avoid use of electrocautery or if using it then keep the power settings to as low as possible. Spray mode should also be avoided. During laparoscopic procedures use as a smoke evacuation filters. During bowel handling take care to avoid contact as it may risk transmission, case of transmission is reported.<sup>6</sup> This includes transrectal biopsy apart from other procedures related to bowel. Renal transplantation should be avoided and recipients should be consultations as per telemedicine guidelines.<sup>3</sup>

### Separate facility for COVID-19

Hospitals with urological and other departments should have separate facility for the positive COVID-19 patients. This includes screening and triage facility, isolation and dedicated waiting areas. It should be fully equipped with availability of intensivists and other specialists. All the drugs needed to treat SARS-CoV-2 should be readily available. Urologist should intervene as and when needed using standard precautions. We have started separate COVID-19 facility in our hospital.

### Surgery in confirmed SARS-CoV-2 patients

In confirmed positive cases the patient should first be evaluated by the specialists dealing with positive patients specially a chest physician and other specialists with a multidisciplinary approach. In such cases the surgery should be postponed for 3 months unless it is an emergency, in which case the emergency procedure should be performed following all the standard operating procedures (SOPs) related to surgery as recommended by WHO<sup>7</sup> and USIs.

### Academic activities

These should not suffer. We can start doing virtual online academic activities to keep ourselves updated about the urological guidelines and all needed information about COVID-19. And of course, this is the correct time to finish the academic research of writing articles, which was slow or paused previously before the current situation. Even if an urgent need arises for a meeting, the number of personnel in the room should be reduced to minimum, keeping in mind the necessity of social distancing, personal protective wears and other things.

### What should we do during decreasing lockdown norms

As lockdown is slowly decreased by our government, we can slowly start doing full outpatient departments and (OPDs). We may start doing elective surgical procedures may slowly start all other departments. The number of consultants, trainees and other related staff should be limited and teams should be made to work rotation wise weekly for OPDs, operation theaters and for the admitted patients, so that they can self-quarantine themselves for a week. In such a way we will be well prepared for the worst situation, if it arises. (Fig. 6) This planning will also help in saving the resources like PPE for future use. We are following the same in our hospital.

**Department of Gen. Surgery**  
**Surgical Teams OPD/OT/Emergency/Ward**  
20.07.2020 To 26.07.2020

Sr. No.	Place	Teacher Name	Day/Time	Signature
1	OPD	Dr. Arshya Wagh Dr. Manoh Patil Sachin Shinde Rahul Dote	Monday To Saturday 9:00am To 4:00pm	
2	OT	Dr. Vedrao Karale Dr. Vinod Karale Kail Mankar Chaitanya Chitambar	Monday To Saturday 8:00am To 4:00pm	
3	Male Ward	Dr. Prakash Patil Dr. Anup Dhanraj Akshay Karne Pratik Dohate	Monday To Sunday	
4	Female Ward	Dr. Prakash Patil Dr. Siddhant Patil Akhilraj Wagon Kundan Chitambar	Monday To Sunday	
5	Emergency	Dr. Manoh Patil Dr. Jay Patil Manoj Chitambar Prakash Chitambar	Monday, Tuesday & Sunday 8:00am To 8:00am	
6		Dr. Manoh Patil Dr. Vinod Patil Pratik Chitambar	Tuesday & Friday 8:00am To 8:00am	
7	Hospital	Dr. Rajul Shinde Dr. Akshay Shingal Kailash Akhrot Laxman Kulkarni	Wednesday & Saturday 8:00am To 8:00am	
8		Nikhil Dhanraj Pratik Chitambar	Monday To Sunday	

\* Daily attendance is compulsory irrespective of your duty schedule.  
\* Dr. Prakash Patil will be in charge of both male & female ward and Dr. Anup Dhanraj manage of Dr. Prakash's theatre.

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example of rotation wise weekly duty schedule followed in our department and hospital

**Fig 6:** showing the example of rotations duty schedule followed in our department

### Training

Apart from all above we should have proper training for the staff as per guidelines of the Ministry of Health and Family Welfare to work more efficiently and cautiously. In this way we can help and guide our doctors and health care associated personnel.

### To summarize

The present situation of COVID-19 is grave. This pandemic has created health crisis even in the most developed countries. It has become a major challenge for us. Urologist along with other specialists have become a major part of resource allocation management. We should now screen all patients, despite the symptoms and deal with them accordingly. The evidence about the disease is still emerging and we need to change ourselves as new evidences and guidelines come. We as urologist should make our decisions based on these evidences and apply the principles of triaging for the urology patients. And finally, we should take care of the damage done by non-COVID-19 diseases that still exist and the problems because of them are continued.

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### Conflicts of Interest

None.

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