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Proposed Urology Guidelines during COVID19 Pandemic

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Hand note For the Sudanese residences in urology SBMS. 2020

1. Introduction

The world is currently in the grip of the COVID-19 pandemic. Rapid changes in medical priorities are being enforced across all health-care systems. Urologists have had to reduce or halt their clinical activity and assist on COVID-19 wards. The repercussions on urological patient outcomes for delayed treatments and diagnosis remain to be defined. (1)

Sudan has 375 confirmed cases of **COVID-19** within its borders as of 29 April 2020. Until further notice all commercial flights to **Sudan** have been cancelled and all land borders have been closed. Effective Saturday, April 18, 2020 the Government of **Sudan** has established a 24-hour lockdown for the next three weeks in Khartoum. (2)

The urological services are run through several units in the teaching hospitals where the majority of other disciplines are available beside them. with the exception of Gezira Hospitalthe mandates for these unit during this plight is to tailor their activities according to the sets of priorities and to abide to the integral precautions endorsed by the federal ministry of health, stratifications of urological services and participate as a second line reserve for the man and facility power to win the combat against this pandemic.

Selective evidence and keynotes;

1) The staff of urology can contract the infection from asymptomatic virus carriers and fromairborne, direct touching, blood, possibly from the stool during TRUS and not yet confirmed or excluded. SARS COV2 nucleic acid was detected in urine albeit the transmission not confirmed through urinary spillage.
2) Urological surgery increases the mortality by 20% with COVID219
3) Smoke in laparoscopic surgery and the fumes of cautery are potential source of contamination.
4) Formalin, alcohol70% and Chlorine 5000\l and not chlorohexidine is the best for decontamination.
5) Acute renal injury may complicate COVID 19.
6) Any fever should be dealt with cautiously.
7) NSAIDS are not yet confirmed aggravating the COVID infection.
8) Metastatic Urological cancers carries poor prognosis.
9) Urological surgery is advisable to be done by expert in this pandemic.
10) The need of any blood transfusion should be the last option in this pandemic.
11) Minimize the admission period with only one co patient and with good distancing in the wards.
12) Ensure the repetitive cleaning of the venues with disinfectant, stick to proper hand washing for staff, workers and patients.
13) Avail the vicinity of local isolation venue for the staff with reasonable services.
14) Identify the notification methods for referral of suspected cases to the epidemic authorities. Double check them.

We proposed this guidelines under the following pillars.

1) Availing the protective measures according to the risk.
2) Managing the on call residence and auxiliary staff.
3) Setting a triage
4) Identification of the priority list and rescheduling system.
5) Intervention precautions.
6) Distant counselling and PHC empowerment.

1-Availing the protective measures according to the risk.

1-Protection Level one: in the Pre-examination triage, general outpatient department.

- Disposable surgical cap
- Disposable surgical mask
- Sanitizers \hand washing service.
- Work uniform
- Disposable latex glovesor/and disposable isolationclothing if necessary.

Level II protection in· Imaging examination of suspected/confirmed patients, · Cleaning of surgical instruments used with suspected/confirmed patients.

- Disposable surgical cap
- Medical protective mask (N95)
- Work uniform
- Disposable medical protectiveuniform
- Disposable latex gloves · Goggles

Level III protection, when the staff performs operationssuch as tracheal intubation and when the staff performs surgery on suspected patient.

- Disposable surgical cap
- Medical protective mask (N95)
- Work uniform
- Disposable medical protective uniform
- Disposable latex gloves
- Full-face respiratory protective devices or powered air-purifying respirator.

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2- Managing the on call residence and auxiliary staff.

Try to minimize the number of residence to the least number and this could bedone with the following measures;

1) Divert the reception of all urological cases to ER (when available) or surgical department triage in the hospital.
2) Conduct all the urology service as on call duties.
3) Freeze the referralclinic, elective surgeries,non-urgentimaging and scopes.
4) Setting up the team with the minimum persons with once duty in a couple of weeks if possible or at least one in seven.
5) Empower the trained nurses to shoulder part of the residence responsibilities.
6) Training the staff for COVID, triage,washing hands,PPE. 8 STEPS

Protocol for Donning PPE:

Put on special work clothes and work shoes → Wash hands → Put on disposable surgical cap →Put on medical protective mask (N95) → Put on inner disposable nitrile/latex gloves → Put ongoggles and protective clothing (note: if wearing protective clothing without foot covers, pleasealso put on separate waterproof boot covers), put on a disposable isolation gown (if required inthe specific work zone) and face shield/powered air-purifying respirator(if required in thespecific work zone) → Put on outer disposable latex gloves.

Lastly ensure good catering and motivating incentive for all staff.

3- Setting the triage;

Establish one entry system for the hospital or for the urology unit witheither oncall, visual, phone or clinical triage. Use the MOH module checklist.

1) One desk two meter off the patients better with thermal unit.
2) A trained nurse with level one protective measures or a call focus for phone divert.
3) A phone or a call system.
4) Sanitizers. (Alcohol, chlorine, chlorines soaps etc.
5) List for triage ;

4-Identification of the priority list and rescheduling system.

This will prioritized in accordance with this criteria;

Levels	(1) Low Priority	(2)Intermediate Priority	High priority (3)	Emergency (4)
Definition	Clinical harm very unlikely if postponed 6 months	Clinical harm possible if postponed 3-4 months but unlikely	Clinical harm very likely if postponed > 6 weeks	Life threatening situation
Triage	Back home assure pts	Give drugs \ advices \Rescheduled for two months	Treat with the minimum best	Admit and proceed
Action \management	Defer by 6 months	Diagnosed within 3-4months	Diagnosed within 6 weeks	Managed within 24 hours

Proposed List of the common urological condition\ procedures in Sudan; Elimam et al 2020.
N.B. you can use the EAU COVID19 Guideline list for further details.

Level	1	2	3	4
Bladder cancer		CYSTECTOMY	Workup . First TURBT Intravesical treatment TTT	TUR for hematuria with clot retention
Bladder cancer	Follow up of low risk after the 12 months	Palliations procedures	Follow up in the first 6months	Managing diversions acute complications
TRUS biopsy(Pac)	AGE >73	PSA<10 G<7	DRE +PSA >10 G>7	Fixity or sign of cord comp. CRF
Treatments			intermediate	High risk
Advanced Pca		Sub capsular orchiectomy	Brachy Radiation chemotherapy	LH RH AGONISTS Radiation for cord
	Tunneling tur	Radical surgery		
Testicular cancer diagnosis and treatment			Unilateral All radiation	Bilateral All chemotherapy
Renal cancer(nephrectomy)	Follow up after surgery		All ,NSS, LAP\salvage	With bleeding Or PAIN
Renal stone	Simple		Bilateral non obstructing	Bilateral obstructing or solitary Or urosepsis
BPH	IPSS,8	IPSS>8	bleeding, Middle lobe syndrome. Prolonged AUR or renal impairment.	Recurrent bleeding. Clot retention
Incontinence	All	Severe stress		
Infections	Cystitis, urethritis, uncomplicated UTI	Complicated UTI Pelvic pain, prostatitis		Urosepsis., fourneirs gangrene
ED \infertility	All sperms problems	Late hypogonadism	ED with depression	
Surgery for diagnosis and treatment for benign conditions	Hernias- orchidopexy-hydrocele-varicocele Transplantation VVF.	Peyronie,s Urethroplasty. PCNL.	PCN for unilateral obstruction. Nephrectomy for renal	Abcesses PCN for bilateral obst. Torsion. Impacted stone.

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	Cystoscopy. Lap search. Circumcision	S nephrectomy. DJ removal . Testicular biopsy	trauma. Vesicostomy OR ablation for PUV.	Suprapubic catheterization. Elicking for clot retention
Urological Injuries Diagnosis \treatment				Renal, Ureteral bladder, testicular Penile
Renal failure	Transplant		Permanent VA.	Dialysis , temporal vascular access
Urine retention				Relief by cath. or suprapubic
Urethral stricture	Urethroplasty.	VIU	Dilatations	
Education	Residency	Safety measures	Infection control systems	COVID 19

States	Urology units	With telephone for call			
Khartoum		Omdurman	KNH	Ibn Sinaa	Police medical city
		Soba U H	Ibrahim Malik	East Nile	Kuwaiti
		Military medical city	Fedail	Royal Care	Etc
		Chinese			

Reference s

[1] EAU guidelines for COVID19 2020

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