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.

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.

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 Hospital the mandates for these units 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 5000l and not chlorohexidine is the best for decontamination.

5) Acute renal injury may complicate COVID 19.

6) Any fever should be dealt with tautiously.

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 gloves/or 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 operations such 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.
2- Managing the on call residence and auxiliary staff.
Try to minimize the number of residence to the least number
and this could be done 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 referral clinic, elective surgeries, non-
urgent imaging, 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.

Protocol for Donning PPE:
- Put on special work clothes and work shoes → Wash hands
- Put on disposable surgical cap → Put on medical
- Put on special work clothes and work shoes → Wash hands
- Put on disposable latex gloves. (note: if wearing protective clothing without foot covers,
nitrile/latex gloves
- Put on goggles and protective clothing
- Put on disposable isolation gown (if required in the specific work zone) and face shield/powered air-purifying respirator (if
required in the specific work zone) → Put on outer
- Disposable isolation gown

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 with the on call, visual, phone, or clinical triage. Use
the MOH module checklist.
1) One desk two meter off the patients better with thermal
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.

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

This will prioritized in accordance with these criteria;

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.

<table>
<thead>
<tr>
<th>Level</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bladder cancer</td>
<td>CYSTECTOMY</td>
<td>Workup . First TURBT Intrasvesical treatment TTT</td>
<td>TUR for hematuria with clot retention</td>
<td></td>
</tr>
<tr>
<td>Bladder cancer</td>
<td>Follow up of low risk after the 12 months</td>
<td>Palliations procedures</td>
<td>Follow up in the first 6months</td>
<td>Managing diversions acute complications</td>
</tr>
<tr>
<td>TRUS biopsy(Pac)</td>
<td>AGE &gt;73</td>
<td>PSA&lt;10 G&lt;7</td>
<td>DRE +PSA &gt;10 G&gt;7</td>
<td>Fixity or sign of cord comp. CRF</td>
</tr>
<tr>
<td>Treatments</td>
<td>intermediate</td>
<td>High risk</td>
<td>Brachy Radiation chemotherapy</td>
<td>LH RH AGONISTS Radiation for cord</td>
</tr>
<tr>
<td>Advanced Pca</td>
<td>Sub capsular orchietomy</td>
<td>Brachy Radiation chemotherapy</td>
<td>LH RH AGONISTS Radiation for cord</td>
<td></td>
</tr>
<tr>
<td>Tunneling tur</td>
<td>Radical surgery</td>
<td>Unilateral All radiation</td>
<td>Bilateral All chemotherapy</td>
<td></td>
</tr>
<tr>
<td>Testicular cancer diagnosis and treatment</td>
<td>Lean up after surgery</td>
<td>All ,NSS, LAPsalvage</td>
<td>With bleeding Or PAIN</td>
<td></td>
</tr>
<tr>
<td>Renal cancer(nephrectomy)</td>
<td>Simple</td>
<td>Bilateral non obstructing</td>
<td>Bilateral obstructing or solitary Or uropepsis</td>
<td></td>
</tr>
<tr>
<td>BPH</td>
<td>IPSS,8</td>
<td>IPSS&gt;8 bleeding, Middle lobe syndrome. Prolonged AUR or renal impairment</td>
<td>Recurrent bleeding. Clot retention</td>
<td></td>
</tr>
<tr>
<td>Incontinence</td>
<td>All</td>
<td>Severe stress</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infections</td>
<td>Cystitis, urethritis, uncomplicated UTI</td>
<td>Complicated UTI Pelvic pain, prostatitis</td>
<td>Urosepsis., fourneirs gangrene</td>
<td></td>
</tr>
<tr>
<td>ED \infertility</td>
<td>All sperms problems</td>
<td>Late hypogonadism</td>
<td>ED with depression</td>
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<td>-----------------------------------------</td>
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<td>--------------------------------------------------</td>
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<tr>
<td>Renal failure</td>
<td>Transplant</td>
<td>Permanent VA.</td>
<td>Dialysis . temporal vascular access</td>
<td>Renal, Ureteral bladder, testicular Penile</td>
</tr>
<tr>
<td>Urine retention</td>
<td></td>
<td></td>
<td></td>
<td>Relief by cath. or suprapubic</td>
</tr>
<tr>
<td>Urethral stricture</td>
<td>Urethroplasty.</td>
<td>VIU</td>
<td>Dilatations</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>Residency</td>
<td>Safety measures</td>
<td>Infection control systems</td>
<td>COVID 19</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>States</th>
<th>Urology units</th>
<th>With telephone for call</th>
</tr>
</thead>
<tbody>
<tr>
<td>Khartoum</td>
<td>Omdurman</td>
<td>KNH</td>
</tr>
<tr>
<td>Soba U H</td>
<td>Ibrahim Malik</td>
<td>East Nile</td>
</tr>
<tr>
<td>Military medical city</td>
<td>Fedail</td>
<td>Royal Care</td>
</tr>
<tr>
<td>Chinese</td>
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Reference s


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