GOVERNMENT OF WEST BENGAL
HEALTH & FAMILY WELFARE DEPARTMENT
SWASTHYA BHABAN, BLOCK GN-29, SECTOR V
SALT LAKE CITY, KOLKATA -91

Memo No. M/639

Date: 17.04.2020

To
The Principal (All Medical Colleges)
The Medical Superintendents cum Vice Principal (All Medical Colleges)
The Chief Medical Officer of Health (All Districts and Health Districts)
The Superintendents (All DH/ SSH/ SDH/ SGH)
The Block Medical Officer of Health (All blocks)

State Protocol for Clinical Management of COVID-19 Cases, West Bengal

In partial modification of the Memo No. HPH/9M-21/2020/77 dated 31.03.2020, the following final guideline in order to streamline the management protocol of COVID-19 affected patient across the State, prepared by the Expert Committee is hereby being circulated.

All concerned are hereby instructed to adhere to the guidelines outlined in the enclosed protocol.

All concerned are further instructed to share the guidelines to all faculties, specialists, Medical Officers under their control.

Director of Medical Education
Government of West Bengal

Memo No. M/639/1(4)

Dated: 17.04.2020

Copy forwarded for information and necessary action please to:

1. DDHS (PH) and SSO, IDSP, West Bengal.
2. SNO, IDSP, West Bengal
3. Dy. CMOH-II, all Districts and Health Districts.
4. Guard File

Director of Medical Education
Government of West Bengal

Director of Health Services
Government of West Bengal
Management Protocol of COVID-19
Government of West Bengal

COVID-19 Suspects

- SYMPTOMATIC contact of laboratory confirmed cases
- SYMPTOMATIC health care workers (HCWs)
- Severe Acute Respiratory Illness (SARI)
- ASYMPTOMATIC direct contacts or HCWs exposed without protective measures (to be tested within day 5 to day 14)

MILD Disease
Fever, Cough, Malaise, Sore Throat without Shortness of Breath

MODERATE Disease
FEVER ≥ 100° F with or without Cough, Sore Throat, Myalgia, Difficulty in Breathing.
PLUS
ANY ONE of the following:
1. Respiratory Rate > 24/min,
2. SpO2 < 94% in room air
3. Altered sensorium – Drowsiness / Confusion / Stupor
4. Infiltrates on chest X-ray
5. Altered LFT / RFT

SEVERE Disease
Moderate disease with ARDS and/or, Sepsis with MODS and/or, Septic Shock.
SBP < 90 or, DBP < 60 mmHg

ADMIT Mild cases at Level-1; ADMIT Moderate/Severe cases at Level-2 and TEST

Test POSITIVE
Mild case
- Isolation at Level-3
- Paracetamol
- Oral Fluids
- Look for danger signs
- Hydroxychloroquine for High Risk group

Test NEGATIVE
Mild case
- Symptomatic management & plan for discharge
- Afebrile, Asymptomatic, No Breathlessness
- Vitals Stable
- Chest X-Ray Clear
- 2 NEGATIVE tests 24 hours apart

Test NEGATIVE
Moderate / Severe case
- Repeat test after 5 days. If still NEGATIVE, look for other etiology
- Clinical & Radiological improvement
- 2 NEGATIVE tests 24 hours apart

Test POSITIVE
Moderate / Severe case
- Send to Level-4
- Oxygenation
- Paracetamol
- MDI (avoid nebulization)
- Calculate QTc from ECG
- HCQ + Azithromycin
- Chest X-ray, ABG, CBC, LFT, RFT, Lactate
- Respiratory failure requiring mechanical ventilation
- Hypotension requiring vasopressor support
- Worsening of mental state
- Multi-Organ Dysfunction

DISCHARGE & Advice Home Quarantine for 14 days

Stratify High Risk cases
- Age > 60 years
- Chronic Lung Diseases
- Chronic Liver Disease
- Chronic Kidney Disease
- Hypertension
- Cardiovascular disease
- Cerebrovascular disease
- Diabetes
- HIV
- Cancers
- Immunosuppressive drugs

Send to Level-4

Refer to ICU

- NIV/HFNC to be used carefully in view of aerosol generation
- Ventilation as per ARDS protocol
- Standard care for ventilated patients
- Conservative fluid management in hemodynamically stable patient
- Antibiotics for sepsis in < 1 hour after sending blood / urine culture
- Closed suction and HME filters
- ECMO for refractory cases
- Corticosteroid NOT to be used routinely.
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of Drug</th>
<th>Dose</th>
<th>Side Effects</th>
<th>Contraindications</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Hydroxychloroquine</td>
<td>400 mg BD x 1 day, then 400 mg OD x 4 days</td>
<td>Gastrointestinal, QT Prolongation in ECG</td>
<td>Contraindicated in QT&gt;500 ms, Myasthenia Gravis, Porphyria, Retinal Pathology, Epilepsy. Pregnancy not contraindication</td>
</tr>
<tr>
<td>2.</td>
<td>Azithromycin</td>
<td>500 mg OD x 5 days</td>
<td></td>
<td>Caution when combining with Hydroxychloroquine in patients with QT prolongation in ECG</td>
</tr>
</tbody>
</table>

**If Hydroxychloroquine (HCQ) is not available, Chloroquine Phosphate (500 mg BD for 10 days) may be considered**

**Tests:**
- CBC, Biochemistry, Pulse Oximetry, ABG
- ECG at presentation. If initial QTc>450 msecs, try to avoid quinolones/macrolides in them or monitor QTc closely.
- Chest X Ray at presentation and then as needed.
- Serum Ferritin for assessment of prognosis.
- Virologic testing on every alternate day.

**Discharge:**
- Asymptomatic, Afebrile, No Breathlessness
- Stable vitals
- Other organ parameters normal or satisfactory
- Chest X Ray Clear
- Viral clearance in nasal-pharyngeal swabs after two tests become negative at 24 hours apart.

**Follow up:**
- Home quarantine for 14 days
- Follow up after 2 weeks and 4 weeks

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**Chemoprophylaxis:**
Recommendations For Empiric Use of Hydroxy-Chloroquine For Prophylaxis of SARS-COV-2 (As Per ICMR Guideline)

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Eligible individual category</th>
<th>Dose</th>
<th>Contraindication</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Asymptomatic health care workers in the treatment of suspect and confirmed patients</td>
<td>400 mg twice daily with food on day 1 followed by 400 mg once weekly for 7 weeks</td>
<td>Children below 15 years, known history of retinopathy and hypersensitivity to Hydroxychloroquine</td>
</tr>
<tr>
<td>2.</td>
<td>Asymptomatic household contacts of laboratory confirmed cases</td>
<td>400 mg twice daily with food on day 1. Followed by 400 mg once weekly for 3 weeks</td>
<td>-Do-</td>
</tr>
</tbody>
</table>

**Key Considerations:**
1. Drug to be used only under prescription of Registered Medical Practitioner
2. Consult doctor in cases of drug reaction
3. All asymptomatic contact should remain in home quarantine.
4. Asymptomatic showing symptoms should immediately seek medical advice

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**Status of the Patient | COVID Hospital Levels**

| Suspected Mild Case, Not Yet Tested | Level 1 |
| Suspected Moderate / Severe Case (SARI), Not Yet Tested | Level 2 |
| Test Confirmed Mild Case | Level 3 |
| Test Confirmed Moderate / Severe Case And Test Confirmed Mild Case with High Risk | Level 4 |

**According to severity Level 1 and 2 are for COVID Suspects**

**According to severity Level 3 and 4 are for COVID Cases**

**Positive Cases and Not-yet-Tested Suspects Must Not Be Kept in the Same COVID hospital**
# Top Sheet for Suspected / Confirmed Covid-19 Patient

<table>
<thead>
<tr>
<th>Name:</th>
<th>Regn. No.-</th>
<th>Date of Admission -</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age:</td>
<td>Gender:</td>
<td>Admitted By -</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ward</th>
<th>Bed No.</th>
<th>Under:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>Hypertension</td>
<td>IHD</td>
</tr>
<tr>
<td>Immunosuppressive Drugs</td>
<td>Pregnancy</td>
<td>LMP</td>
</tr>
</tbody>
</table>

## Test for Covid-19

<table>
<thead>
<tr>
<th>Date</th>
<th>Method (RT-PCR/ Rapid)</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date -</th>
<th>Day -</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Morning</th>
<th>Evening</th>
<th>Night</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>Normal / 98.4°F - 100 °F / &gt;100 °F / High</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pulse</td>
<td>&lt;100 / 100 - 120 / &gt;120 per minute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respiration</td>
<td>&lt;24 / 24 - 30 / &gt;30 per minute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BP</td>
<td>Syst &lt;90, Diast &lt;60 / Syst &gt;100, Diast &gt;70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breathlessness</td>
<td>Nil / Mild / Moderate / Severe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SpO₂</td>
<td>&gt;94% / 94 - 90% / &lt;90%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensorium</td>
<td>Conscious /Drowsy /Stupor /Coma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urine Output</td>
<td>ml</td>
<td>ml</td>
<td>ml</td>
</tr>
<tr>
<td>Auscultation</td>
<td>Breath Sound / Crepitation / Rhonchi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicines Given</td>
<td>Home Medicines / Insulin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Treatment</td>
<td>Antibiotic/Nor-Ad/Dopamine/Anti-Coagulant</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Blood Counts</th>
<th>Hb%</th>
<th>TC</th>
<th>Neutrophil</th>
<th>Lymphocyte</th>
<th>Platelet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemistry</td>
<td>Sugar (F/PP/R)</td>
<td>Urea</td>
<td>Creatinine</td>
<td>LFT</td>
<td>Ferritin</td>
</tr>
<tr>
<td>ABG</td>
<td>pH / PaO₂ / PaCO₂ / HCO₃ / Lactate / (FiO₂)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chest X-Ray</td>
<td>Normal / Findings, if Abnormal</td>
<td>(with time)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECG</td>
<td>Normal / QTc / Other Findings</td>
<td>(with time)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Tests</td>
<td>PT / INR / aPTT / D-Dimer / Trop-T</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blood Culture / Urine Culture</td>
<td>(with time)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signature</th>
<th>Staff Nurse</th>
<th>Appetite / Could Take Food and Medicines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature</td>
<td>Doctor on Duty</td>
<td>Stable / Worsening / Ventilation / Referral / Discharge / Death</td>
</tr>
</tbody>
</table>