Letter to the Editor

[The Editor is not responsible for the views expressed by the correspondents]

COVID SECOND WAVE — The Guiding Principles

Sir — COVID-19 pandemic is soon going to complete two years of human circulation and we are still not sure how long it is going to be there in the community. Therefore the burden of co-infections and their comorbidities with COVID-19 is expected to be higher in future. The World Health Organisation on 11th March 2020 declared that COVID has become pandemic and the Clinical Management Guidelines[1] made before COVID-19 may not be applicable now for the management of patients. It is also challenging to exclude other causes of Acute Febrile Illnesses (AFI)[2] such as Vector Born Diseases like Dengue[3], Chikungunya, Malaria, Scrub Typhus, Leptospirosis and Enteric Fever especially during the transmission season during COVID pandemic period. We have to control certain comorbid conditions like CKD, CAD, strokes, COPD, Brochial Asthma, Diabetes, etc. Guidelines are frequently changing but certain specific most suitable guidelines by WHO and ICMR[4] are very helpful to manage the Corona Pandemic. Our aim and objective is to share our views and sensitise ourselves[5], consultants and Healthcare Workers about our proper guidelines which we found suitable and of rational use at present time.

Guidelines We Recommend :

(1) RT-PCR may be negative-(read ORF/Rdrp and N/E gene as S gene may not be detectable).

(2) Diagnosis (If RT-PCR negative) Clinical symptoms, Serum Markers CT Chest.

(3) Loss of smell is equal to RT-PCR

(4) Virus stops replicating after 9 days.

(5) Around15 minutes of exposure is required to get the infection.

Features of Pneumonia :

Temp > 101

CRP > Rapid rise of CRP

Persistant Cough

5% fall in SPO2 after 6 mins walk.

Investigation at Home in mild cases on day 3 and repeat at day 7-8 :

(1) CBC with NLR (Neutrophil/Lymphocyte Ratio)

(2) CRP,

(3) D-DIMER (Very important- Repeat after 3 days)

(4) Blood Sugar

Add Investigations in Moderate/Severe cases:

(1) CT Chest

(2) IL-6

(3) Ferritin

(4) LDH (A sign of cell death)

(5) LFT

(6) KFT

Interpretation of Investigations:

(1) CRP a good marker to start Steroid

(2) NLR a good prognostic factor.

(3) Increasing Lymphopenia indicates severity

(4) D-Dimer-Monitor every 2-3 days

(5) LDH - Useful follow-up parameter only

(6) IL-6 is very unreliable.(Timely collection and rapid transportation required. Choose the same LAB)

(7) Thrombocytopenia can be seen in about 20%cases

Importnt Principles :

(1) Antivirals are most helpful, given in (replication phase 1 to 7days of symptoms)

(2) Anti inflammatory (steroids) should be started in early Pulmonary phase i.e. after 7 days (replication phase)to prevent Covid Cytokine Storm.This phase may set in early in Severe cases

(3) LMWH (Enoxaperin) 40mg or 1mg/Kg S/C OD dose should be given in all admitted patients/all patients of Pneumonia

Critical Signs :

(1) Temp> 103 without PCM or 101 after PCM

(2) Persistent cough

(3) Sudden onset of shortness of Breath(SOB)

(4) Rapid increase in CRP

(5) CT Chest score >13/25

General Home Treatment :

(1) REST is a big help (light walking, sitting allowed)

(2) SPO2 monitoring

(3) Plenty of fluids

(4) Paracetamol. Don't hesitate to add Nimuselide/Mefenamic acid in case of high fever and bodyache

(5) Good diet

(6) Vit-C, Vit-D, Zinc

(7) Ivermectin/ Favipiravir may/maynot help (doubtful weak antivirals). Don't be anxious as Fevipiravir is not available these days

(8) Azithromycin, Doxycycline are used to counter secondary infection or undiagnosed sore throat.

(9) Cetrizine/Fexofenadine cough syrups may help

(10) Steam kadha help as throat soothing agents

(11) Isolation to protect others in family

Specific Treatment :

(1) STEROIDS- Start Early to all patients with SPO2 <94 (persistent) on any day of Disease.

Which steroid to use :

Inj Dexamethasone (2ml= 8mg Dexamethasone Sodium Phosphate contains 6mg Dexamethasone) to be given IV

Or, Tab/inj Methyl Prednisolone 32 mg

Or, Tab Wysolone/Tab Omnacortil 40 may be especially useful for patients in Home isolation waiting to get a bed

Or, Dexona tablets are available in 0.5 mg tab ..So 16 tab may be required if taken orally.

All steroids Dexa/Solumedrol/Prednisone/ methylprednisolone likely to have same effect.

In Hospital Steroids doses are higher

When to avoid Steroids: Better to avoid steroids in early replication phase, in asymptomatic cases, in mild symptoms but less than 7 days, in viremia phase with normal CRP and CT Chest.

Controversial: in cases with CT score <8 with Disease <7 days,

(2) Enoxaperin 40mg (1mg/Kg)

a) To all moderate to severe symptomatic patients (If Spo2 <94,PR >110, RR is>24)

b) If Pneumonia is suspected clinically, by X-ray or CT Chest then start LMWH.

(Oral Anticoagulant like Rivoraxaban15mg per day or Apixaban may be options for patients on home isolation with no injection facility)

(3) Remdesivir- In hospitalized patients (should be started in less than 10 days of onset).

How to Suspect Cytokine Storm :

(1) Unremitting fever with extreme weakness and fatigue.

(2) Shortness of breath in second week.

(3) Sudden high fever onset in second week

(4) increased Cytopenia

(5) Hyperferritinemia

(6) Pulmonary involvement

(7) Rising CRP >50

(8) Worsening CT Chest

Conclusion : Above Guidelines have been found useful and further scope of improvement is always there as our experiences improve.

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