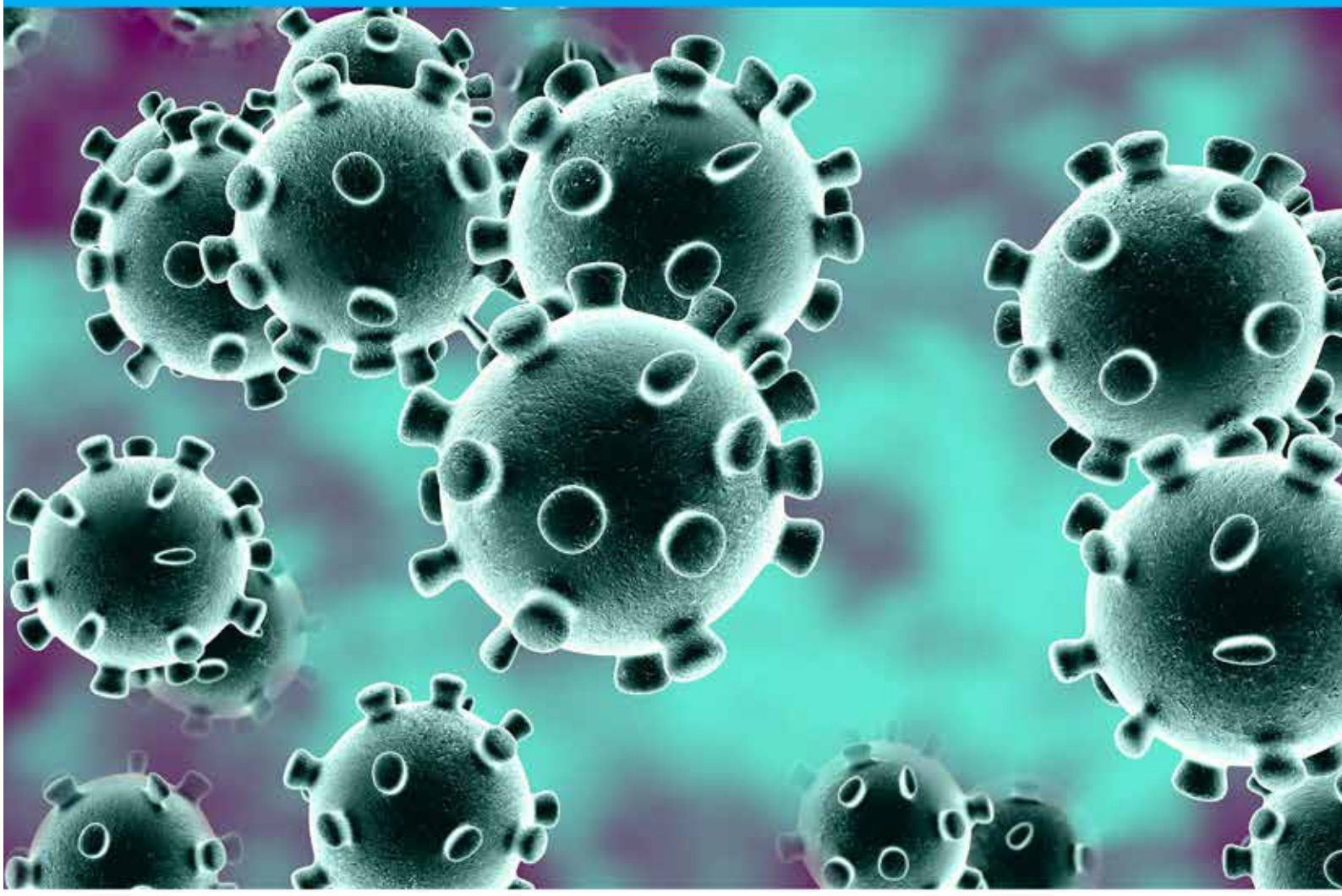
بروتوكول علاج فيروس كورونا المستجد

(covid-19)



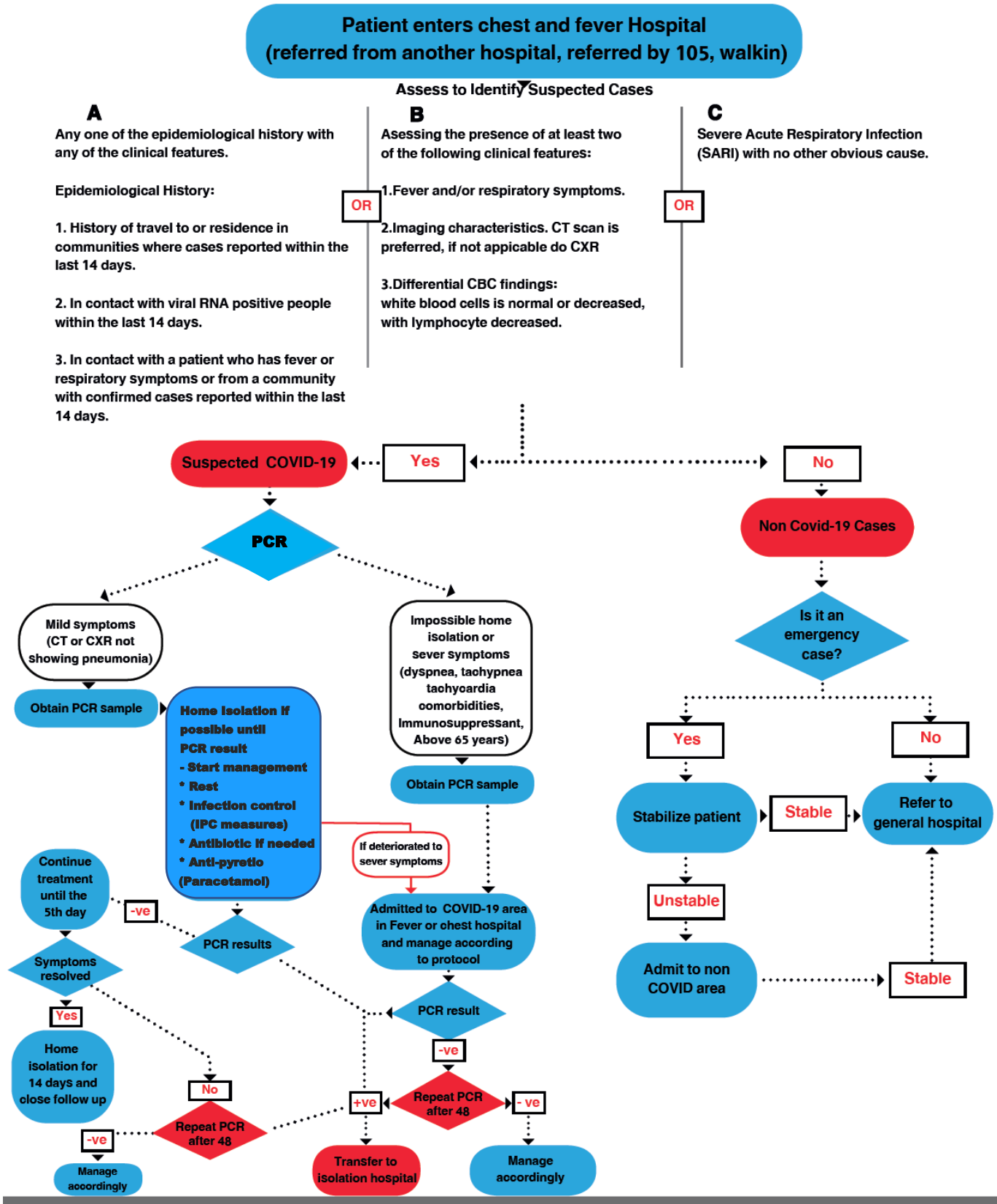
مع تحيات :

وحدة التعليم الإليكترونى
بكلية الكوت الجامعة

Suspected COVID-19 Cases Management in Triage Hospitals

COVID-19

كلية الكوت الجامعة



N.B.
- Asymptomatic contact to +ve case should undergo home isolation and should seek medical advice whenever symptoms develop.
- Healthcare providers exposed to suspected or confirmed COVID-19 cases should follow the algorithim shown in MOHP guide booklet.

PCR Positive Cases

Mild Case

Symptomatic case
With Lymphopenia or Leucopenia
With no radiological signs for pneumonia

Check for

1. **Age**
2. **Temperature 38.5**
3. **SaO2 ≤92%**
4. **Heart Rate ≥110**
5. **Respiratory Rate≥25 /min.**
6. **Neutrophil / lymphocyte ratio on CBC ≥ 3.1**
7. **Comorbidities**
8. **Immunosuppressive Drug**
9. **Pregnancy**
10. **Active Malignancy**
11. **On Chemotherapy**
12. **Obesity (BMI>40)**

All No → **and** → **Age < 60**

- **Home Isolation (Symptomatic Treatment)**
- **Strict isolation**
- **Follow and use personal protective guide equipment**
- **If any deterioration occurs, back to hospital**

NB: Paracetamol is the preferred agent

Any YES → **OR** → **Age > 60**

Isolation in a healthcare facility

Treatment

- Hydroxychloroquine (400 mg twice in first day then 200 mg twice for 6 days)
- Vitamin C (1gm daily)
- Zinc 50mg daily
- Acelylcisteine 200 mg t.d.s.
- lactoferrin one sachet twice daily

Moderate Case

Patient has pneumonia manifestations on radiology associated with symptoms &/Or leucopenia or lymphopenia

Hospitalization

- **Lopinavir/Ritonavir (2 tab 200/50) every 12 hrs**
- **Ribavirin 400 mg every 12 hrs For 14 Days**

(Not recommended if symptoms started for more than 7 days)

+

- **Anticoagulation: Prophylactic OR Therapeutic if D-dimer > 1000**

OR

- **Hydroxychloroquine (if NO contraindication) 400mg /12 hrs for 1 day then 200 mg every 12 hours for 9 days**

+

- **Anticoagulation: Prophylactic OR Therapeutic if D-dimer > 1000**

Steroids if patients is dyspneic or CT SCAN showed significant deterioration

Severe and Critically Ill Case

If any of the following criteria is present

1. RR > 30
2. Sa02 < 92 at room air
3. PaO_2/FiO_2 ratio < 300
4. Chest radiology showing more than 50% lesion or progressive lesion within 24 to 48 hrs
5. Critically ill if SaO_2 <92, or RR>30, or PaO_2/FiO_2 ratio < 200 despite Oxygen Therapy.

Admit to Intermediate Care Or Intensive care

Early Block the storm if steroids

Tocilizumab
4-8mg/kg/dose
Max 2 doses

Antiviral	Steroids	Anti-Coagulation	Prone	Avoid Hypoxia
Drugs As is In Severe case	Methylprednisolone 1-2 mg/kg/d	Enoxaparine 1 mg/kg BID	Awake or ventilated	O_2/ NIV/HFNC/IMV
Add Antibiotics As per protocol	1 mg for non ventilated and 2 mg for ventilated	Consider D-dimer level as a guide	Improves V/Q matching and survival	Don't wait too much for any type of support Keep

COVID 19 Critical Care Chain of Survival

Antiviral drugs

- Lopinavir/Ritonavir (2 tab 200/50) every 12 hrs.
  + Ribavirin 400 mg /12 hrs
  + Interferon beta 1b +
  Azithromycin (500mg daily) or doxycycline (200mg first day then 100mg daily OR

NB: Remdesivir if available: 200 mg day 1 then 100 mg daily for 9 days

OR

- Hydroxychloroquine (if NO contraindication) 400mg /12 hrs for 1 day then 200 mg every 12 hours for 9 days +
- Lopinavir/Ritonavir (2tab 200/50) every 12 hrs.+
- Doxycline or azithromycin

Non Invasive Ventilation or High flow nasal cannula (HFNC):

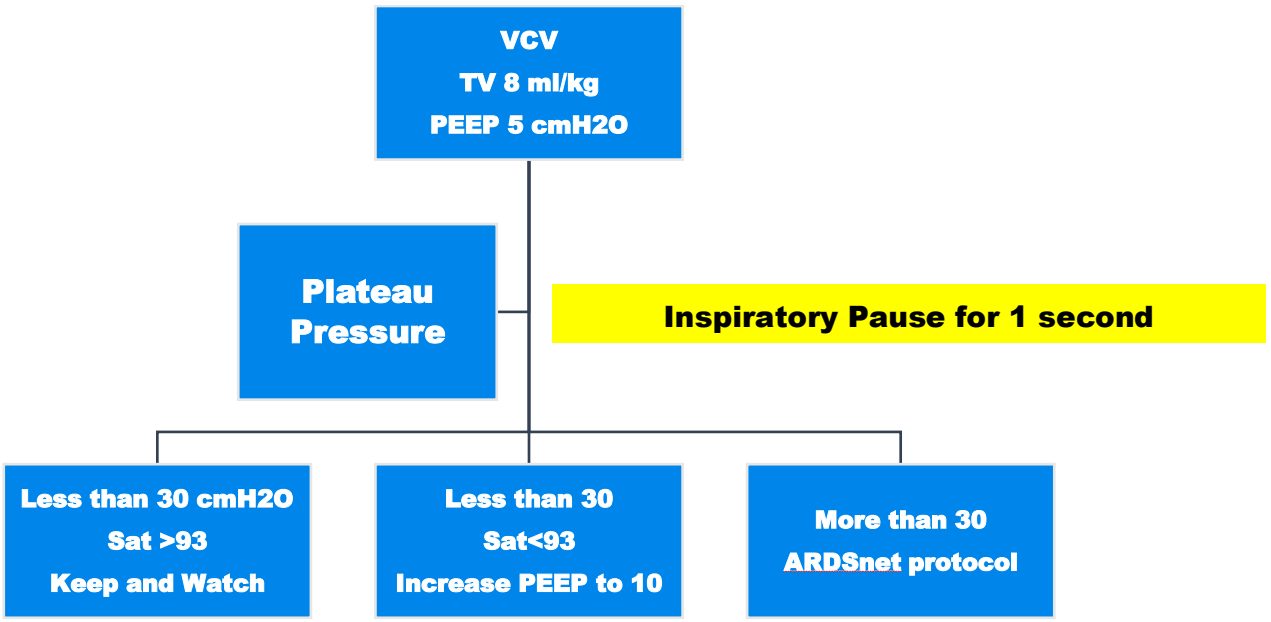
- **Conscious patients with minimal secretions.**
- **Hypoxia SpO2 < 90% on oxygen.Or hypercapnia >40 cmH2O provided pH 7.3 and above.**
- **NIV trial shall be short with ABG 30 minutes apart.**
- **Any deterioration in blood gases from baseline or oxygen saturation or consciousness level shift to IMV.**
- **CPAP gradually increased from 5-10 cmH2O.**
- **Pressure support from 10-15 cm H2O.**
- **HFNC can be alternative to NIV.**

Invasive Mechanical ventilation:

- **Use PPE specially goggles during intubation and avoid bagging.**

- **Indications:**
  - **Failed NIV or not available or not practical.**
  - **PO2 < 60 mmhg despite oxygen supplementation.**
  - **Progressive Hypercapnia.**
  - **Respiratory acidosis (PH < 7.30).**
  - **Progressive or refractory septic shock.**
  - **Disturbed consciousness level (GCS ≤ 8) or deterioration in consciousness level from baseline.**

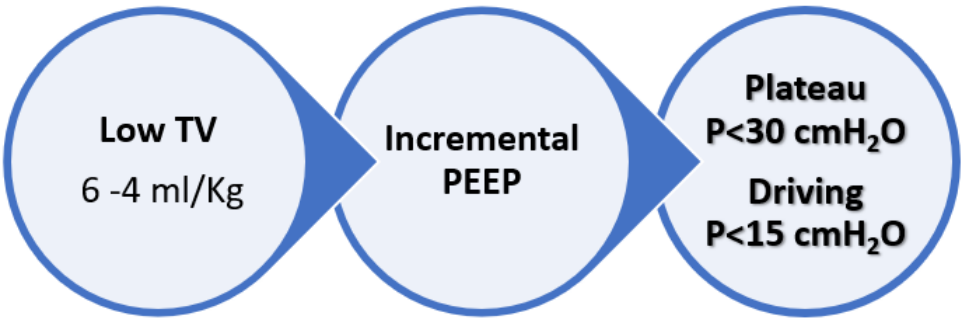
Step 1: **Initiation of Invasive Mechanical ventilation**



IF PLATEAU ABOVE 30 CMH_2O

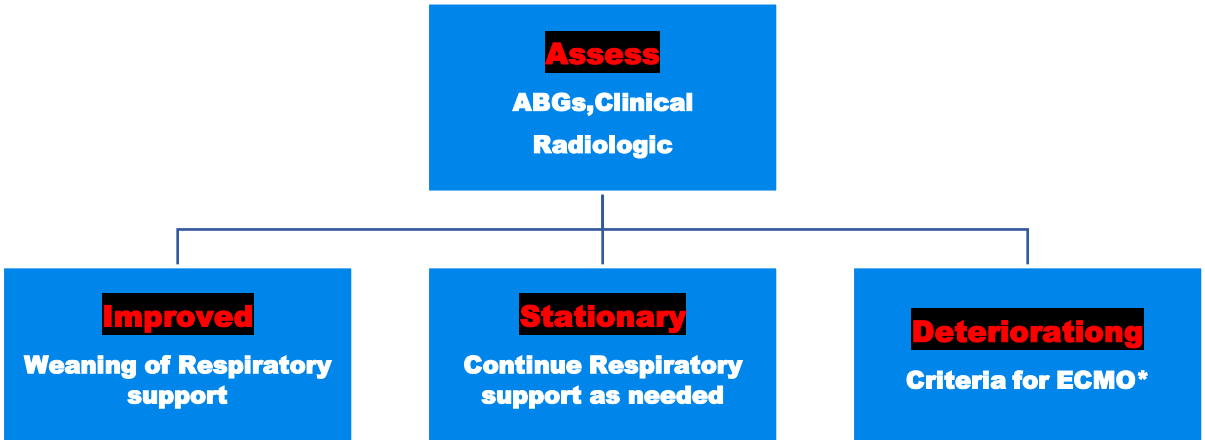
Step 2: Shift to ARDSNet protocol if needed

- **ARDSNet protocol:**



Start with tidal volume of 6 ml/Kg to keep plateau pressure on volume controlled ventilation (VCV) below 30 cmH_2O, decrease to 4 ml/kg if the plateau remain higher than 30 allow permissive hypercapnia so long the pH is above 7.3 compensate by increasing respiratory rate up to 30 breath/minute. Consider heavy sedation and paralysis. If pressures are high or any evidence of barotrauma shift to pressure controlled ventilation and be cautious about low tidal volume alarms for fear of unnoticed endotracheal tube obstruction. Consider ECMO early if eligible. Increase PEEP gradually if the patient remains hypoxic according to FIO_2 level to keep driving pressure < 15cmH_2O. NEVER FORGET PRONE POSITION.

Step 3: Assessment of Respiratory support Outcome



*Criteria for VV ECMO: Age below 55, Mechanical ventilation duration less than 7 days, No comorbidities, Preserved consciousness level, PaO_2/FiO_2 <100 despite prone RESPscore >0. Expert opinion is needed and depends on availability.