



PAAIS
Pakistan Allergy Asthma & Immunology Society
 PAAIS (Member Society of WAO)
 Reg No: RS|ICT|415 NOV.2003

Ref:-PAAIS COVD-202001

Dated:- 2nd April,2020

To

The Prime minister, Special Advisor to PM on Health Dr Zafar Mirza, Dr.Faisal Sultan National coordinator for corona virus, Interior Minister, Deans of Medical Universities, Medical Heads of Pakistan, Army, Navy, Air Force, Chief Ministers of all the provinces, Pakistan Allergy Asthma and Immunology Society (PAAIS)members

Sir,

PAAIS was established In 2003 and is the only member society of the World Allergy Organization in Pakistan. PAAIS has established Center of Excellence in Allergy and immunology at Fazaia Medical College since its inception. In face of a nation challenge in shape of COVID-9, a Task force of Pakistan Allergy Asthma and IMMUNOLOGY was organized to develop guidelines and has recommended following protocol for the prevention COVID-19 infection. The members of the Task group were:- Patron in Chief PAAIS Air Chief Marshal Sohail Aman, Dr. Shahid Abbas, President PAAIS; Dr.Sohail Karim Hashmi PAAIS, Senior Vice President PAAIS & Ex.Secretary PMDC; DR.Athar Niaz Rana Senior Vice President PAAIS(Consultant Allergy & Immunology, Maj Gen [Retd.],Professor Muhammad Aslam, Vice President PAAIS (Pro-Vice Chancellor, NUMS). Dr. Mohammad Raza Naqvi, Vice President PAAIS (Board Certified in Internal Medicine & Oncology), Dr.Aqsa Batool, Gen.Sec.PAAIS, Dr.Maryam Abbas,Executive Member PAAIS

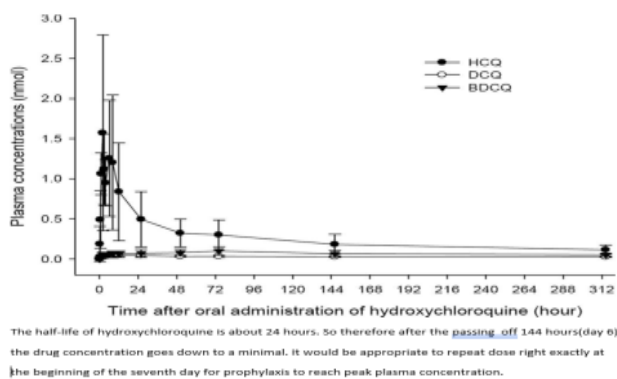
PAAIS GUIDELINES FOR PROPHYLAXIS AND TREATMENT OF CORONA VIRUS INFECTIONS

Eligible Individuals:-

- **Asymptomatic medical professionals' workers** involved in the care, management and treatment of patients suffering from COVID 19.
- **Asymptomatic household** contacts of laboratory confirmed cases.
- **General Public**
- **Hospitalized patients**

	Tablets	Initial Dose	Maintenance dose (Depending on length of pandemic in Pakistan)	Recommendation
Asymptomatic medical professionals	Hydroxychloroquine	DAY-1 400mg twice a day	8-12 Weeks 400mg weekly	FDA
Asymptomatic household contacts of confirmed cases	Hydroxychloroquine	DAY 1 400 mg twice daily on day 1	DAY1-DAY-5 200 mg twice daily for 4 days Followed by 400mg weekly for 8-12 weeks to be taken with meals.	(CDC 2020; Yao 2020).
General public Prophylactic Protocol	Hydroxychloroquine	400mg weekly	8-12 weeks	

(Some recommend 200mg weekly or 200mg every 3 weeks based on half-life of Hydroxychloroquine is 24 days, maximum concentration in about 3 hours. it takes 4 half-lives for the drug to be eliminated from the body. So therefore, to have the maximal viricidal property a higher dose of 400mg would be a better option)



Exclusion Criteria: -

-Heart patients with prolonged QT interval on ECG, Retinopathy, known hypersensitivity to hydroxychloroquine, 4-aminoquinoline compound

-Not recommended to children below age 15yrs

Complete General Public Prophylactic protocol:-

After extensive research Immuno-Nutrition experts of PAAIS recommends following Prophylactic protocol for prevention of Corona Virus infections. (Detoxvit-CZM developed by

Dr.Shahid has same formulation of Buffered Vitamin C, Zinc & Magnesium, recommended 3-4 tablets daily)

Sr.no.	Product	Oral Dose
1	Hydroxychloroquine	400mg every week (Approved by FDA)
2	Vitamin C	2 grams daily
3	Zinc	30-40mg Daily
4	Magnesium	400mg daily
5	Vitamin D	5000IU daily for 2 weeks then 2000IU daily continuously
6	Selenium	55ug daily
NOTE: These can be bought from any Pharmacy.		

Recommended Protocol for Hospitalized COVID Patients (SuperImmuno-COVID19 Drip)

SuperImmuno-COVID-19 Drip developed by PAAIS Task force incorporating recommendations of Prof. Fowler of VCU, USA administering vitamin C to either an infected patient who is on the ward and beginning to deteriorate (developing an oxygen requirement). If a patient is admitted and begins to develop an oxygen requirement which means the virus has infected the lung and pneumonia is progressing or a patient who has already developed respiratory failure and is on the ventilator. Vitamin C can be infused through a peripheral or a central line.

- 1. Hydroxychloroquine 200mg thrice a day for 10 days**
BD or Chloroquine 500mg BD may be given for 10 days along with (for Cardiac patients refer to Annex)
- 2. Azithromycin 500mg on Day 1 and then 250mg daily for 4 days to prevent bacterial reoccurrence.**
ECG should be monitored for QT Interval prolongation risk with use of this Combo(for cardiac patients refer NNEX)
- 3. Favipiravir: On the 1st day, 1600mg twice a day,-from the 2nd to the 7th day, 600mg each time, twice a day. Oral administration, the maximum number of days taken is not more than 7 days.**
Or
Remdesivir 200mg IV Day 1 followed by 100mg daily for 9 days

or

Tocilizumab: The first dose is 4 ~ 8mg/kg and the recommended dose is 400mg IV infusion. if there is still fever within 24 hours after the first dose and the interval between two medications \geq 12 hours. Intravenous infusion, The maximum of cumulative number is two, and the maximum single dose does not exceed 800mg.

IV INFUSION OF THE FOLLOWING for person weighing 70kg:(SuperImmuno- COVID Drip)

Sr.no.	Ingredients	Dose	Duration	Infusion Time	Diluents
1	Vitamin C 50mg/kg	3500mg	<u>Every 6 Hours for 5 Days</u>	<u>30 minutes</u>	50ml 5% Dextrose
2	Sodium Bicarbonate		As needed		
3	Vitamin B12	1ml	Once a day		
4	Zinc	1.6ml	ONCE A DAY		
5	Magnesium Sulphate	1ml	ONCE A DAY		
6	Selenium	1ml	ONCE A DAY		

Intramuscular

Vitamin D3 100000-150000 IU Intramuscularly ONCE A DAY

Inhalers

Salbutamol inhaler 200mcg : 2 puffs Six hourly.

- **Government should take note of the following: -**
Taking Hydroxychloroquine/Chloroquine should not give you false sense of security
- **The above recommendation is the opinion of the expert physicians and pharmacists of PAAIS to Government of Pakistan, WHO & WAO.**
- **Physicians who wish to use above protocol are to contact PAAIS via phone call or email to tailor each specific case. Please contact**
[allergycentreaqsa@gmail.com/](mailto:allergycentreaqsa@gmail.com) allergycenter@hotmail.com

- The guidelines will be available on www.allergypaais.org and www.allergycenter.info
 - **DR.SHAHID, President PAAIS with the help of physicians and pharmacists of PAAIS have developed protocol for prophylaxis and treatment of corona virus patients. China & Other countries are treating corona virus patients with High Dose of Vitamin C, Zinc and micronutrients along with antiviral with success. He has developed special Immunoboost formulas for prevention and treatment of COVID-19 and other viral & bacterial infections to boost the immune system.**
1. **DETOXVIT IMMUNO-BOOST CZM, Tablet containing Vitamin C 500mg, Magnesium 200mg and 10mg Zinc. Recommended dose 3-4 tablets daily.**
 2. **SUPER IMMUNO COVID Drip-T & P WITH ALL THE REQUIRED ANTIOXIDANTS to boost the Immune System in killing the viruses. Complete cocktail of Antioxidants & Micronutrients (High Dose of Vitamin C, Zinc, Magnesium, Vitamin D, Vitamin A) have been scientifically proven to be effective in prevention and treatment of corona virus infections. The formula developed with the incorporation of protocol of Prof. Fowler VCU and after extensive research.**

ANNEX

Recommendations of American College of Cardiology (ACC) for use of Hydroxychloroquine and Azithromycin in cardiac patients

Ventricular Arrhythmia Risk Due to Hydroxychloroquine-Azithromycin Treatment For COVID-19

Table 1. Risk Score For Drug-Associated QTc Prolongation⁹

Risk Factors	Points
Age ≥ 68 y	1
Female sex	1
Loop diuretic	1
Serum K ⁺ ≤ 3.5 mEq/L	2
Admission QTc ≥ 450 ms	2
Acute MI	2
≥ 2 QTc-prolonging drugs	3
sepsis	3
Heart failure	3
One QTc-prolonging drug	3
Maximum Risk Score	21

K⁺ indicates potassium; and MI, myocardial infarction.

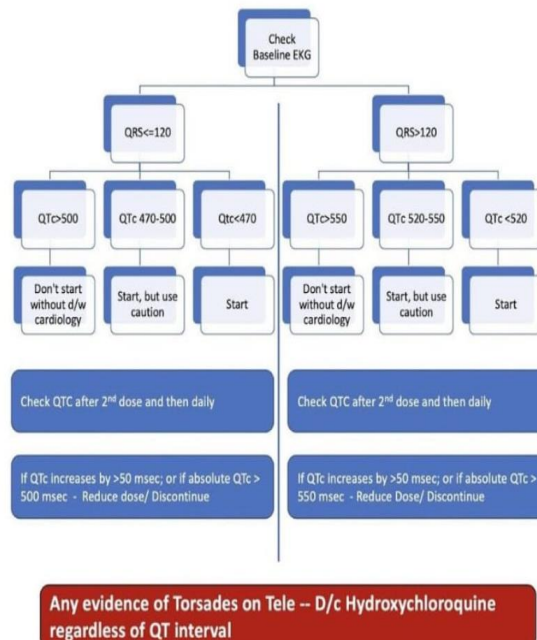
Table 2. Risk Levels For Drug-Associated QT Prolongation⁹

Low risk = ≤ 6 points
Moderate risk = 7-10 points
High-risk = ≥ 11 points

QTc monitoring Protocol for Hydroxychloroquine use in Covid patients

- Discontinue all other QT prolonging agents*
- Place patient on Telemetry
- Compare QTc on baseline EKG and Telemetry - If they match, then the further QTc checks could be on telemetry only
- EKG#1/ Qtc#1 – at Baseline.
- EKG#2/ QTC#2 – at least 2 hrs after 2nd dose of HCQ
- QTC#3 and onwards – daily on telemetry only/ or on EKG if QTcs >500

* If the patient is on a QT prolonging drug that is considered critical for their medical/psychiatric care - then either HCQ should not be used/ or discuss with cardiology about the risk and benefits of the drug



ANNEX:-ICU Recommendations by experts for management of corona virus in ICU

Ventilation

- Early high PEEP is probably not the right strategy and may be harmful. This is not ARDS in the early phase of the illness.
- Avoid spontaneous ventilation early in ICU admission as also may be harmful.
- There is clear microvascular thrombosis happening in the pulmonary circulation, which leads to an increased dead space.
- Also some evidence of early pulmonary fibrosis reported from Italy, possibly oxygen related, possibly inflammation related.
- Not many patients have reached extubation yet in London, re-intubation seems to be common.
- Brompton are seeing wedge infarcts in the lungs on imaging, along with pulmonary thrombosis without DVT.
- Proning is essential and should be done early. Don't just do it once. Threshold for many centres is a PF ratio of 13, but all agreed, do it even earlier.
- Early on in the disease, the benefit of proning lasts < 4 hours when turned back to supine, as the disease progresses into a more ARDS type picture, the effect is more long lasting.
- Many centers using inhaled nitric oxide and prostacyclin with good effect. Tachyphylaxis with NO after 4-5 days.
- Generally people are using humidified circuits with HMEs.
- A very interesting thing they are doing at Georges is cohorting by phase of disease i.e. early, late, extubation / trachy. It involves more moving of patients but helps each team to focus on things more easily.
- Leak test before extubation is crucial; others are also seeing airway swelling.
- Wait longer than usual before extubating, high reintubation rates reported. Do not extubate if inflammatory markers still high.

Fluid balance

- All centres agreed that we are getting this wrong.
- Most patients come to ICU after a few days of illness where their temp was 38-40 and they were hyperventilating i.e. severely dehydrated.
- High rates of AKI being caused by overzealous driving with frusemide, leading to unnecessary CVVHF.
- Hypovolemia leads to poor pulmonary perfusion and increased dead space.
- Centres echo'ing their patients are seeing a lot of RV dysfunction without raised PA pressure.
- Many have improved oliguria by dropping the PEEP i.e. these patients are really hypovolemic.

[On nights I have observed many of our patients with a zero fluid balance and temperature of 39 i.e. they will be 2-3 liters negative in reality.]

- Most centres are therefore now backing off of strict zero balance, particularly in hyperpyrexia. They are moving more towards avoidance of large positive fluid balance.
- Lung 'leak' not as prominent in this disease as classic ARDS

Renal

- Higher than predicted need for CVVHF - ? Due to excess hypovolemia.
- Microthrombi in kidneys probably also contributing to AKI.
- CVVHF circuits clot frequently. Georges and Kings now fully anticoagulant the patient (rather than the circuit) as it is the only way they can prevent this. One centre using full dose LMWH as they have run out of pumps.
- Kings now beginning acute peritoneal dialysis as running out of CVVHF machines.

Workforce

- A 'tactical commander' is essential on every shift, who is not directly responsible the care of ICU patients.
- Most centres now getting towards 1:6 nursing ratio with high level of support workers on ICU.

- Training has largely fallen by the wayside as it is too large a task. People are being trained on the job.

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Consultant Allergy & Immunology
President PAAIS

For any queries please contact

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Note: All these protocols for treating COVD19 already in use in different countries. A doctor in UK gives his comments (Copy attached)

