Summary of Major Recommendations for COVID – 19 Infection Treatment and Protection of Healthcare Professionals

– Experiences of Dr. Gunagxi Li and His Team

Risks and Markers of life threatening complications

- Time is the critical issue for COVID infection treatment
- If the patients will develop fever (37.3 Celsius), the fever needs to be treated as soon as possible – the key for success is to get the patients out of the fever as soon as possible
    - The recommended medication for fever treatment is combination of ibuprofen(800mg every 6 hours) + paracetamol (325 mg to 1 g orally every 4 to 6 hours) + Ginseng(tea) [Male, Baseline comorbidity, Obesity]
    - Also traditional Chinese herbs seems to be BEST helpful, Nobody died if they took Chinese herb on the first day of fever.

      Ginseng 15g; Notopterygii 15g; Angelicae Pubescentis15g; rhizoma ligustici wallichii 15g; Bupleuri 15g; Platycodi10g; Dry-fried Fr. Aurantii 10g; Peucedani10g; Poria10g; Ginger 6g; Glycyrrhizae 6g; peppermint 6g
      Mix them and boiled for about 30 minutes. DRINK

    - Also use of aspirin might be helpful (dose 300 mg once a day), however treatment with aspirin was not tested in China yet

- In patients who will develop fever and the fever is immediately treated successfully by medication suggested above, those patients rarely develop life threatening complications, ALI/ARDS.
- Approximately 80% of patients who develop fever can be treated at home successfully ant anti-fever treatment is started promptly.
- In patients that will develop fever in the first week but the fever is treated successfully immediately – prognosis of these patients seems to be VERY good
- The treatment strategy in the first week is critical to prevent the complications, particularly ALI/ARDS, which usually develops during the second week of COVID infection
- In patients, that will develop fever, which is not treated – these patients are on high risk to develop life threatening complications, ARDS
- ARDS is the major cause of mortality in patients with COVID – 19 infection
- In patients with untreated fever, the transmission from stable condition to ARDS may develop very rapidly. Rapid and often unexpected onset of ARDS typically occurs during the second week of infection
    - ARDS usually occurs during the second week of infection
    - It is expected that pathophysiological mechanism of ARDS is over-reaction of immune system

to a new type of virus
    - The key strategy for this life-threatening situation is High Nasal Cannula Oxygen Support followed by early intubation and lung protective strategy.
    - Use of ECMO seems to worsen prognosis (no patient on ECMO survived)
- Patients with COVID infection and 02 saturation 93% or less should be put immediately on Oxygen Support – watch closely – P/F ratio less than 200 should be considered to be intubated because early ventilator support seems to be very effective to treat ARDS(Prone position ventilation more than 12 hours a day seemed very helpful)
- Be Sure to Triage Patients as early as possible. Every patient on fever need to have a pulse oximeter to watch for the progress of the disease

Risk of life threatening complications in different populations

- Children develop life threatening complications very rarely
- Women may develop fever, but despite having fever (usually very mild could recover by herself), women rarely develop ARDS

Use of Anti-virotic drugs and Antibiotics

- Anti-virotic drugs such Tamiflu should not be used for treatment of COVID infection and no evidence showed benefit and only harm
- Antibiotics should not be used for treatment of COVID infection and its symptoms because they may worsen prognosis as well
- Corticosteroids should not be used in the first 14 days and they may worsen prognosis as well

Risk of rapid spread of infection

- COVID – 19 infection is a contagious disease. If anyone get infected, the risk of getting infection for those people who will be in close contact with infected person is almost 100% (if one member in the family get COVID -19 infection, almost for sure that all adult members of the family will get infected also if that person was not quarantined. However, the children in that family may stay asymptopmatic or may develop only mild symptoms.)
- Very high risk for COVID infection dissemination represent patients with fever. If there is a patient with fever, he/she must be isolated immediately. Temperature screening is an essential measure we should take to stop virus spread.
- Risk of infection dissemination in patients without fever is much less than in patients with fever.

Recommendation for Protection of Healthcare Professionals

- Only N-95 Masks are effective to protect healthcare professionals against the COVID – 19 infection. Normal masks do not provide proper protection
- PPE(personal protection equipment) should be classified according to the different risks. I-III protection level should be given to the physicians taking care of patients in different stage.
- Hand hygiene is important

I attached CT showing the resolution of infiltrate within one month