CSI webinar

Webinar Q&A: "COVID-19: personal perspectives from Italy"
Date: 24 March 2020

Q. Do you have any statistics on the incidence of Myocarditis in Covid-19 patients?
A. In our experience, 60% of patients have troponin (cardiac testing is routinely performed in all COVID-19 patients, including trop and BNP). Overt myocarditis only 3 patients of total 250 so far. Starting to do heart echo.

Q. It is very hard to diagnose myocarditis in the context of Covid-19, can you comment on clinical and laboratory features of your myocarditis patients?
A. Troponin, echo, heart failure, ECG, normal coronary angiography. So far, no biopsy is done.

Q. Any data about steroid use in dg of myocarditis?
A. No experience yet.

Q. In the case of VT/VF do you discontinue chloroquine? Or how do you manage?
A. DC shock by nurses (always scrubbed 24/7 inside the ward, with 6 hours shifts) inside the ward. Not all are monitored, some VF may be missed! We stop all QT-prolonging drugs as Chlorochine, Remedesvir, Azithromycin, and other personal medications.

Q. Do you administer some of the hyped drugs, like Chloroquine, Remedesvir?
A. All hospitalized patients take drugs, inside internal or international protocols. The baseline is hydroxychloroquine + antiretroviral (+/- antibiotics if suprainfection is suspected). Remdesivir only in ICU patients. Tocilizumab only in patients who are worsening with elevated IL6.

Q. Have you seen any positive effect on the outcome of patients from antiviral therapy?
A. While we use them routinely, it is impossible to judge at this moment

Q. Have you continued a PPCI service throughout? What has been the impact on door-to-balloon time? Did you ever consider lytic based reperfusion?
A. Yes, 24/7 pPCI program. Patients self-admitting or brought by hospital: no change in door to balloon time, Swap is done. The transfer of STEMI patients from the Covid-19 ward takes an additional 30 minutes. Lytic therapy was not used yet.

Q. How often do you encounter conduction disturbances in Covid-19 patients and how long do you wait for a possible retreat before implanting a permanent device?
A. So far, no experience. We did not encounter this yet.

Q. ACE-Inhibitors and ARBs are possibly responsible for more severe cases. Do you notice any correlation with severity? Are there any case-control-studies underway looking at risk factors for severe pneumonia-like diabetes, NAFLD, or nutrient deficiencies like selenium deficiency?

A. We do not stop ace inhibitors according to ACC/AHA guidance. Diabetes and liver diseases are predictive for worse outcomes according to Chinese studies.

Q. Do you continue ACE Inhibitors and AT-II Blockers to the Covid-19 patients admitted to the hospital?

A. Yes, following recent ACC/AHA letter

Q. How do you act for heart failure patients and how do you rule out corona pneumonia?

A. In any suspect case Swap and CT scan are performed; it takes a lot of resources but till now it paid back.

Q. Are there physicians/health care professionals coming from other countries to Italy to assist? (especially from the countries that had direct Covid-19 treatment experience?)

A. Yes, we have doctors from China (with Covid-19 experience) and Cuba (with Ebola experience).

Q. Excellent initiative. What is the survival rate of intubated patients?

A. Difficult to say - many are still intubated. In total, we extubated 5 patients alive. 1 of them was discharged from the hospital.

Q. How many Covid-19 patients require coming to the Cath Lab for any reason? For example, STEMI, etc.?

A. Very few. In Lombardy, in 2 weeks 35 patients were studied with symptoms and ECG of STEMI. 40% did not have a culprit lesion.

Q. Are you using CT also for cad rule out, especially in the setting of EKG changes of STEMI?

A. Not yet done, but definitely, a good idea as a CT is easier to perform than angiography and the absence of coronary occlusions can be ruled out at a small price of maybe 20 minutes time delay.

Q. Greetings from Athens! Stay Strong! Happy to see you sound and well! What would you comment on recent opinions for opting for thrombolysis instead of pPCI as a first approach and keep pPCI for the failure of lytics or shock?

A. I think lytics only needed if expected time to needle is strongly prolonged by Covid-19 isolation (i.e. >90 min).

Q. Do you have Covid-19 patients without a fever?

A. This is a frequent scenario, with fever present only in 80-92% of patients; probably a lot of young patients got a light disease with only flu symptoms.

Q. How do you manage cardiac arrest in patients with suspected Covid-19? Do you wear full PPE and delay CPR until everyone is gowned? Do you have many cardiac arrests?

A. The most important thing is to discuss (and we do it daily with anesthesiologists and with multidisciplinary evaluation) which patients will be resuscitated in case of cardiac arrest based on age and severe comorbidities (especially oncologic diseases); patients that are candidates to CPR, in case of arrest, are treated by the ward nurses (that are always gowned) while physicians and anesthesiologists get dressed.

Q. Do you have any impression or event if the CHD patients have a high risk for severity of Covid-19? Thanks indeed and may God bless you.

A. Good question. Preliminary data (and good studies from China) show that patients with heart disease are at higher risk of mortality and adverse events; furthermore, obviously, COVID pneumonia may exacerbate pre-existing cardiac conditions.

Q. What are the compelling indications of cardiac or coronary interventions in patients with Covid-19 pneumonia?

A. We have no evidence yet, but strongly believe that STEMI (even in cases with a high suspect of acute myocarditis) is the main indication for cath lab admission. NSTEMI is referred for angiogram only if high risk or with recurrent angina/ischemia or instability.

Q. When do you discharge the patients? How long should a patient be fever-free? PCR before discharge?

A. Lombardia and Humanitas rules are that if you hospitalize a patient, he will receive 5 days of antiviral and hydroxychloroquine (+/- antibiotics is suprainfection is suspected) and can be discharged after 5 days of therapy and 2 days of oxygen and fever-free time.

Q. Do Secretolytics and inhalation of Sultanol help?

A. The use of these drugs is not recommended and, if used via aerosol therapy, is discouraged because of the risk of nebulizing viruses. We use bronchodilators only in patients with pre-existing lung conditions and only with single-patients inhalers

Q. Do you take prophylaxis such as Plaquenil?

A. While some physicians are taking Hydroxychloroquine (or other non-evidence-based drugs such as Vit C) on a personal basis, prophylaxis is not recommended.

Q. Are you allocating doctors based on their age and co-morbidity to treat Covid-19 patients?

A. While this emergency requires hard work from every available resource, we are trying to let young physicians work in Covid-19 wards, while physicians with advanced age or comorbidities (or with complex familiar settings, such as old or diseased relatives) are assigned to help with non-Covid wards and with daily activities such as EKG validation, cardiological evaluation of surgical candidates, and standard ER consultations.

Q. How many physicians/nurses got infected?

A. In Lombardi (10 million inhabitants) we had over 110 physicians who got infected (mainly family doctors and ER doctors) and we experienced already 11 deaths among physicians.

Q. When should you do the PCR test for the staff?

A. While our hospital had a validated test performed inside our labs since the beginning, tests are performed only in healthcare providers that develop symptoms.

Q. Do your physicians get tested frequently?

A. Healthcare professionals get tested only in case of symptoms. Everyone wears a mask and suspected cases are isolated at home.

Q. Did the physicians who are sick with Covid-19 recover already and are they now healthy and working again?

A. In our (Humanitas Hospital) experience, healthcare professionals got sick after assisting patients and no physicians have recovered yet and came back to the hospital.

Q. Are you aware of cases with Covid-19 reinfection?

A. Only anecdotal cases from the newspapers, but no scientific evidence; animal models show that reinfection from the same virus is not plausible; the big deal that we experienced is the long time needed for complete and consistent negativization.