



COVID-19: Experience from Veneto, Italy

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At the moment in Verona, where I live and work, there are 663 COVID19 confirmed cases in an area of 900.000 people. 51 patients are intubated in intensive care units (most of them are overweight men).

The evidence of the first "autochthonous" COVID-19 cases in the North of Italy dates back to 3 weeks ago. Since the last 2 weeks, when the first cases occurred in Verona, our outpatient clinic was limited only to urgent requests; similar decision was taken for the elective interventions. Nevertheless, in the last week all elective interventions were cancelled, both for the Cath-lab and the cardiac surgery.

At the entrance of our outpatient clinic there is a nurse that administers to each patient and companion a survey in order to identify symptomatic people and reduce at a minimum level the probability of contagion. The same survey to establish the risk of COVID infection is administered by our SHO to each patient at the time of admission to the Cardiology ward. Patients referring with mild symptoms are examined (or undergo echocardiogram) with the appropriate personal protective equipment (PPE): surgical mask for both, patient and doctor. The Italian Society of Cardiovascular Imaging (SIECVI) has published a document with the recommendations for a correct use of PPE in this setting.

Since last week, anyone entering the hospital is invited to wear a surgical mask.

Since the beginning of COVID-19 epidemic, only one relative per day can visit a patient in the Cardiology ward, while no relatives are allowed to enter the Cardiology Intensive Care Unit. Every day I personally phone a relative for each patient in order to give them an update on clinical conditions.

Since the virus outbreak, we have been observing a sharp drop in the admission to the emergency room (around -60%). The number of heart attacks is objectively reduced, but at the moment I am unable to quantify it, although reading on social media other colleagues over Italy and Europe report similar findings.

However, in our centre, since northern Italy was declared a "red zone" (about 10 days ago), we have had 5 patients presenting with STEMI, of which only 1 arrived to our attention within 12 hours from the onset of symptoms. During last week, our cardiac surgeons operated on 2 patients because of STEMI related papillary muscle rupture (one referred from peripheral centre).

Patients with STEMI or with cardiac arrest undergo urgent procedures, without significant delay, even in case of COVID suspicion: the Cath-lab team wears personal protective equipment and the primary PCI can be performed.

Sometimes COVID patients have clinical presentation similar to acute heart failure; or there is an overlap between the infection and heart failure. This is a big issue for the cardiologist and reason why some of these patients can be admitted to a Cardiology ward without the correct protection for the department staff.

COVID patients normally present high PCR, high LDH, high creatine kinase, hyperglycemia, lymphocytopenia, normal PCT (in the absence of a sovra-infection).

So far, the Hospital Administration has kept the Cardiology Department and ICU away from the pool Services identified as potential COVID departments in the event of a further extension of the epidemic. In other areas (Lombardy), some hospitals with Cardiology Hub have been entirely dedicated to the treatment of COVID patients (including cardiology intensive care beds) diverting the STEMI network to other "clean" hospitals.

Until yesterday, in our hospital, the task of assisting COVID patients in a non-intensive environment has been assigned to pulmonologists and infectious disease specialists.

Today, the administration has started recruiting internists, gastroenterologists, and even cardiologists.

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