From COVID-19 or because COVID-19?

Running head: Cardiac Surgery during Covid

Actis Dato Guglielmo M., MD

Department of Cardiac Surgery

Ospedale Mauriziano "Umberto I"

Corresponding author:

Actis Dato Guglielmo M.

Senior Staff Cardiac Surgeon

Ospedale Mauriziano di Torino, Largo Turati - 10125

Phone: +39 0115082512; E-mail: actisdato.g@gmail.com

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Fabrizio Rosati and Coll. highlights some aspects to which we will have to get used more and more in the near future: infections and pandemics will condition us in an increasingly predominant way regarding diagnostic, medical and surgical activities in all specialist areas; and this particularly in cardiovascular one (1).

During the first surge of COVID-19 in early 2020, the Italian National Health System had to make a huge effort to meet the changing needs for hospitalization and the need for assistance in intensive care which until then was mainly reserved for patients receiving highly specialized care such as cardiovascular surgery (2).

Moreover in the same period the Italian Society of Cardiac Surgery (SICCH) produced a position paper regarding the management of patients requiring surgery for cardiac diseases (3)
This has inevitably led to the need to block or postpone numerous non-emergency interventions and procedures in the cardio-surgical and cardiology field.

Unfortunately, after few months, facts have been shown that one dies not only "because COVID-19" but also "from COVID-19"!

A recent update of a study analyzing US mortality between March 2020 and January 2021, reported 22.9% more then expected deaths, partly explained by COVID-19. Statistical analysis shows surges in excess deaths that change in timing and duration across different states in US. An increased mortality from non–COVID-19 causes was also observed. An excess of deaths not attributed to COVID-19 could of course reflect either immediate or delayed mortality from undocumented COVID-19 infection, or non–COVID-19 deaths secondary to the pandemic, (delayed care, behavioral health crises). But an undoubted increase in death rates was observed during surges due from several non–COVID-19 diseases such as heart disease (4).

An observational study during lockdown (march-april 2020) in Germany shoved a decreased activity on Cath Lab activity (-35%) and increased cardiac and cardiovascular mortality (+12% and +8%) if compared with the same period of 2019.

Possible reasons were: patient-based anxiety to come to the hospital reinforced by the order to "stay at home" but also the triage of patients according to priority levels, with patients with assumed elective procedures being put on a waiting list, has kept patients from urgently seeking medical attention for chest pain (5).

The Roadmap proposed from the Authors at an early stage of the pandemic and in a European geographical area where the spread of the virus was particularly aggressive, suggests how it is possible, even in emergency conditions, to continue to provide our patients with an adequate therapeutic and surgical answer in terms of results and comfort for the patient (1).

The four steps proposed by Rosati and Coll. in this very early phase of the pandemic event, with current knowledge and improved diagnostic skills, can perhaps be simplified by possibly replacing the use of CT scan with lung ultrasound that seems to provide an adequate, less expensive and faster way for a screening process (6-7).

Nevertheless in the future the need to cohabit with pandemic events and to be able to continue an elective and not only emergency cardiac surgery program represents an imperative.

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