Management of dialysis patients during the current coronavirus outbreak

Dialysis centers should not be tipped into panic but need to adopt common sense precautions. ERA-EDTA has therefore published a set of guidelines recommending several well-balanced measures to dialysis centers.

ABSTRACT: Data from one dialysis center in Wuhan, China [1] show that dialysis patients are more susceptible to coronavirus infection and its complications. ERA-EDTA has therefore decided to share the Milano experience on coronavirus management in dialysis centers [2], which provide clear and efficient instructions for each possible scenario and indicate which hygienic standards are required to break the chain of infection. ERA-EDTA appeals to nephrologists to not handle the situation with panic but with diligence and common sense.

To contain the coronavirus outbreak, Europe has raised the alert level to high. COVID-19 is spreading fast in many European countries and the end of the epidemic cannot be predicted. But not only the virus is spreading... it seems as if the coronavirus panic spreads even more, often leading to irrational thoughts and actions. ERA-EDTA experts therefore appeal to people's sense of reason to handle the situation in a calm, controlled and rational manner. ERA-EDTA advises dialysis centers to take the appropriate precautions but warns against ‘over-precaution’. To avoid further panic or fear, ERA-EDTA has developed a code of standards for European nephrologists to handle the situation in dialysis clinics in the best possible manner. “We have to protect dialysis patients, who are vulnerable patients, from a coronavirus infection, but measures must be well-balanced between alertness and overreaction”, explains Professor Carmine Zoccali, President of the ERA-EDTA.

A coronavirus infection can cause acute respiratory illness and several cases of pneumonia have been reported. In addition, it can affect multiple organs such as the kidney, heart, digestive tract, blood, and nervous system. But are dialysis patients more vulnerable than other persons? So it seems, but data have shown that it is not the “usual” respiratory risk that threatens the life of dialysis patients. A report from one hemodialysis (HD) center in Wuhan [1] highlights that “HD patients with COVID-19 are mostly clinical mild and unlikely progress to severe pneumonia due to the impaired cellular immune function and incapability of mounting cytokines storm.” The Chinese authors concluded that the causes of death among their corona-positive dialysis patients were not directly related to pneumonia but to cardiovascular and cerebrovascular diseases, hyperkalemia, etc. They therefore recommend the medical community to pay more attention to the prevention of cardiovascular events.
“Dialysis patients are at risk – and the situation demands the best care and attention. First, we have to take steps to ensure that dialysis patients do not catch the disease – and, second, infected patients must be handled with care and a special focus on their cardiovascular risks”, concludes Professor Zoccali.

Together with his colleagues, Professor Mario Cozzolino, ERA-EDTA Council Member, developed a set of rules for dialysis centers meant to control the situation without panic but with diligence and professionalism. In the previous weeks, Professor Cozzolino has been working in the “European coronavirus epicenter” in the city of Milan and he wants to share his invaluable experience with other European colleagues who are also facing the coronavirus epidemic.

“Although the situation is severe, there is no reason to adopt specific prophylactic measures for the entire dialysis population”, emphasizes Professor Cozzolino. “Especially in a situation in which we face a general shortage of protection masks and other protection devices we have to ensure a reasonable use of the material. It is not necessary that each dialysis patient wears a mask, instead the masks should be used by infected patients (or patients who had contact with infected persons) and medical staff only. This way we can break the chain of infection and we do not waste materials that are needed elsewhere. All in all, we should not be tipped into panic but we need to adopt common sense precautions.”

The behavior guidelines by Cozzolino et al. [2], published on the ERA-EDTA website, give clear and efficient instructions for each possible scenario (patient is not infected/ patient had contact with people who are coronavirus-positive/ patient is infected). In addition, these guidelines recommend which hygienic standards must be followed to prevent a further spread of the epidemic. “Our simple aim is to control the disease and save our patients’ lives”, concludes Cozzolino.


About ERA-EDTA
With more than 7,000 active members, the ERA-EDTA is one of the biggest nephrology associations worldwide leading European nephrology and one of the most important European Medical Associations. It organizes annual congresses and other educational and scientific activities. ERA-EDTA also produces guidelines, collects data, and performs epidemiological studies through its Registry. The Society supports fellowships and educational/research projects through its committees and working groups. Its publications are NDT, CKJ (Open Access journal), and the online educational journal NDT-Educational. The 2020 Congress will be held on 6-9 June in Milan, Italy.
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