SARS-CoV-2: Sanitize a hospital

Francesco De Caro

F De Caro^{1,3}, *G* Moccia¹, *A* Borrelli², *A* Annecchiarico³, *G* Cioffi², *A* Campanella², *O* Motta^{1,3}, *V* Caputo², *G* Boccia^{1,3}, *M* Capunzo^{1,3} ¹Department of Medicine, Surgery and Dentistry, University of Salerno, Baronissi. Italy

²University Hospital, Salerno, Italy

³Department of Hygiene and Valutative Medicine, University Hospital,

Salerno, Italy

Contact: decaro.francesco@libero.it

Issue:

During the SARS-CoV-2 pandemic, several critical issues emerged. One of these was to identify which was the best terminal disinfection strategy for hospital rooms of a COVID-19. Description of the problem. Our University Hospital adopted ozone disinfection two years ago, recognized internationally as a 'safe gas' and is an excellent disinfectant for its characteristics of attacking and oxidizing each type of organic and inorganic compound and specifically also works against SARS-CoV-2.

Results:

23 ozone generators were purchased, 20 ozonizers were assigned to departments with high environmental sanitation needs, 3 ozonizers supplied to the ozonator team. For the correct use of the equipment, 200 operators were trained in a certified way. The rooms are ozonated with pre-established frequency and whenever a COVID-19 patient is cared for. The ozonation team sanitizes rooms in wards that are not equipped but that may have hosted patients with carriers. Indications have been given in all the wards to create the ozonation room, that can be used as an ozone disinfection chamber, where it is possible to place garrisons and furnishings, even large-sized, that cannot be disinfected in other ways (in addition to sanitization with hypochlorite). The team also provides for the ozonation of ambulances with a predetermined periodicity or in the case of transport of patient carrying SARS-CoV-2. All activities are monitored with a special traceability card.

Lessons:

Terminal disinfection of environments that have hosted patients with COVID-19. Terminal disinfection of the devices used on patients with COVID-19. Increased safety for operators carrying out environmental sanitation.

Key messages:

- Fight SARS-COV-2 with ozone.
- Disinfecting with ozone is safety for everyone.