

# Cardiac arrest training on a COVID-19 patient on the ward

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## Background

**After a request from the medical department, we carried out cardiac arrest training on a Covid-19 infected patient. We uncover new things all the time, both what works and where there's room for improvement.**

## Expected learning return

1. Treat COVID-19 cardiac arrest patient according to resuscitation algorithm, as a team.
2. Identify infection prevention measures - what works, where there's room for improvement and to apply this.

## Location

In situ in the department.

## Scenario

Male, 55 years of age, admitted with breathing difficulties, has confirmed Covid 19 infection. Nurse is present.

A: Airway free. Patient is conscious, talking; B: SpO2 90% on room air, respiration 28; C: BT: 90/50, pulse 135, E: Temp: 39,2. (Nurse may apply Nasal Cannula with slight O2 flow)

### PATIENT BEHAVIOUR

Worsening condition – complaining of increasing chest pains, pain when breathing. Losing consciousness.

(NB: the scenario is under a time constraint, so things deteriorate very rapidly)

### Scenario and debriefing finds:

#### LEARNING GOAL 2: INFECTION PREVENTION - IDENTIFY GOOD PRACTICE AND AREAS FOR IMPROVEMENT:

- Signage of infection information at room
  - The team arrives. Everyone brings the correct protective gear with them – this is all good.
  - The team later realises they didn't register there was infectious patient in the room, although signs are hung up. They get dressed because they see equipment outside of the room. Would they have dressed correctly if all the equipment wasn't placed outside the room?
  - Would it be an idea to make the signing larger/clearer so it's easier for all to see?
- Equipment
  - The team assembles, a CPR compression board is in place, defibrillator plugged in, and after a little uncertainty (the defibrillator clock battery has run down)...the algorithm kicks in.
- Airways – infection – patient/employee:
  - The patient has the face mask correctly fitted; no inhalations have been given before the team arrives
  - The anaesthetist chooses to intubate immediately to prevent the release of aerosols into the room. This is excellent. These are the «new» rules with respect to the pandemic. Information has been received, at least here.
- *Limit the number of people present during airway intervention:*

- It is noted during debrief that it's fully possible to ask people to stand back a little (or out of the room) during intubation, for those who don't have optimal protection in the form of a 3M/P3mask and a visor.
- This requires loud and clear instructions from anaesthesiology personnel.
- Correct disinfection after treatment:
  - A new dilemma - everything that has been inside the emergency room - MUST be cleaned/disinfected with either Lifeclean or appropriate disinfection with alcohol. Both materials are approved by infection prevention here in the building.
  - Here we need to share tasks.
  - A&E must clean off the defibrillator; MIPO must clean the carrying case as the outside must be disinfected. If the case has been opened, an evaluation of whether the contents must be washed/dried, or whether it has been kept far away from the patient must be made. If the nurse has been near the patient and then retrieved something from it, it must be assumed that it is contaminated. Anaesthesia personnel must inspect the equipment trolley in the department and disinfect and make it ready if ward staff are occupied. If we join the patient to MIPO, it is the ward staff's responsibility to disinfect and wash.
- Transmission protection: donning / doffing PPE:
  - In the case of confirmed/suspected infection, all personnel MUST be aware of how to doff PPE according to procedure, including (hand)disinfection, before leaving the room.
  - We didn't look at this today and I suspect we have probably slightly forgotten this.
- LEARNING GOAL 1: Resuscitation Algorithm
  - Nurse notices patient is losing consciousness and at first presses the yellow button for assistance.
  - Compressions are commenced.
  - Assistance arrives, staff don PPE, the nurse presses the arrest button (green), but then needs to go out to alert the resuscitation team and starts to doff PPE. This has already been done by others who now arrive.
  - Otherwise, a good algorithm was managed, safety was maintained, medication was correctly selected and administered using closed loop communication. As always, it's good if the team leader is clear, ideally briefing/summarising during treatment so that the team is informed and can provide feedback if necessary.
    - Why is there uncertainty about which is the arrest button?
  - **Closed loop while carrying out tasks:**
    - The equipment trolley arrives at the ward, but nobody communicates clearly that they have «taken the job» and have carried it out when returning.
    - During debrief, the issue of alerting once again comes up. How do we do this as clearly as possible? Our advice is always clear and with affirmations such as "Can you activate the alarm and get the equipment trolley? / I will activate the alarm and collect the equipment trolley."
- Important to provide training when returning to work:
  - Do personnel re-entering clinical work following a long absence receive an adequate review of what needs to be done with an unconscious patient who is not breathing normally?