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Transference of COVID-19 patient in hospitals - A crucial phase



It is known that Heath care workers [HCW] are at a constant occupational risk for contracting many infectious diseases transmitted from patients, despite existing safety protocols. [1] During an earlier pandemic, it was noted that during the severe acute respiratory syndrome (SARS) outbreak, many HCW got infected with SARS-coronavirus (SARS-CoV) that resulted in severe illness and death [2]. Today, when the world is dealing with dreaded COVID-19 pandemic, many health care professionals are working on frontline and imposing themselves to an un-avoidable hazardous medical emergency.

Current evidence suggests that COVID-19 virus is primarily transmitted between humans through respiratory droplets and contact routes, [3,4] though recent isolated reports in the periodicals also suggest the occurrence of this disease in animals such as lion and horse. Apart from procedures that promote aerosol production, transportation of COVID-19 patient carries a very high transmission risk to personnel involved. Worldwide, clinicians are using several easily executable measures to prevent aerosol exposure. It has been suggested that while shifting a conscious or non-intubated COVID-19 patient, surgical three ply mask should be applied to the patient. If available, one can use a barrier enclosure, that is, a transparent plastic box with small ventilation ports on both sides covering head of the patient. [5] In situations where none of the above is available, use of large transparent sheet to cover the patient from head to toe could be a possible solution. While using this sheet, ensure the head end of the patient should have enough room to breathe or exhale. For shifting of intubated COVID-19 patient, a dedicated transport ventilator should be utilized. If a patient is transferred from the intensive care unit [ICU] to operation theatre [OT] or vice versa, in order to reduce aerosolization risks, the gas flow should be turned off first followed by the tracheal tube clamping with forceps when switching from the ICU ventilator to portable ventilator or from

OT ventilator to transport ventilator. It is important to assure that the intubated COVID-19 patient is fully sedated or paralysed and doesn't cough on the tracheal tube, which could increase the rate of aerosol generation and further spread. Aerosol box and large transparent sheets covering patients head can also be used in intubated COVID-19 patients to avoid aerosol exposure. All persons involved in transporting these patients should procure an appropriate personal protective equipment. In present scenario, it is prudent to treat every suspected COVID-19 patient as a positive case. The purpose of this communication is to highlight possible measures that can help avoid aerosol exposure to the personnel involved in shifting of COVID-19 patients.

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