Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Resuscitation

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Letter to the Editor

Ventilation and airway management during Cardiopulmonary Resuscitation in COVID-19 era

Dear Editor

We compliment Scapigliati and colleagues[1] for the aerosol-limiting solution with a supraglottic airway (SAD) during advanced life support for cardiac arrest, but we have concerns.

Cardiopulmonary Resuscitation (CPR) in COVID-19 pandemic posed unprecedented challenges for healthcare providers (HCP): safety before patients' needs.[2,3] CPR and chest compressions is an aerosol-generating procedures (AGP),[4,5] and pose HCP at risk of airborne SARS-CoV2 infection. Currently chest compressions and defibrillation is recomended,[2,3] Rescuers should wear PPE before starting CPR[3] independently on the ventilation interface.

Fast tracheal intubation, using videolaryngoscope and bougie, in one attempt is recommended.[4] In case of failure use of second generation SADs has been claimed to lower aerosol spread,[4,6] providing leak-free seal be ensured.[7] Solutions with facial or all-body plastic covers have been suggested to reduce aerosolization during airway management, including modifications of SADs,[7] but these might be dangerous.

(1) Positioning the barrier would delay chest compressions and CPR;
(2) A completely occlusive barrier would limit any SAD's position tests (i.e. drain-tube leak test) and gastric access[8];
(3) Wrapping the patient in a plastic cover would limit further airway maneuver, including fiberoptic-aided intubation through intubatable SAD,[5] and would represent a dangerously inflammable pouch full of oxygen in case of defibrillation;
(4) Wrapping plastic removal is a dangerous maneuver, because of potential airway dislocation (including risk of bucking and coughing), and because of risk of "secondary aerosolization" of its contents upon removal.[9]

In lack of evidence, and facing the risk that use of similar devices may generate a false sense of security among HCPs, we strongly recommend to stay with well elaborated guidelines and to use certified airborne-level PPE during CPR and airway management.[2–6]

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Consent to participate

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MS idea and writing of manuscript draft; IDG critical appraisal, writing final manuscript; SF literature check and critical appraisal, writing final manuscript; RG final review, writing final manuscript.

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