AVOIDING CPR ON PATIENTS WITH COVID-19

Covid-19: Are chest compressions an aerosol generating procedure or not?

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The central problem of doctors in the west Midlands being told not to start chest compressions in patients who are in cardiac arrest if they have suspected or diagnosed covid-19 is a lack of evidence on whether chest compressions are an aerosol generating procedure (AGP) that can spread coronavirus.

In 2007, the World Health Organization recommended cardiopulmonary resuscitation (CPR) was an AGP. CPR was then delisted after a systematic review failed to show a statistically significant relation.

The 95% confidence interval ranged from 0.2 to 11.3, however, so the evidence was clearly underpowered and of low quality. WHO’s scientific brief on covid-19 notably included CPR in the list of AGPs, but did not specify which components are aerosol generating.

Controversially, there are two mutually exclusive schools of thought on how to interpret this. One, comprising Public Health England (PHE) and Health Protection Scotland (HPS), recommends starting compression only CPR without FFP3 masks, stating there is no evidence to suggest it is an AGP. The other, comprising the Resuscitation Council (UK) and the US Centers for Disease Control and Prevention, states that compression only CPR is an AGP, and that the theoretical risk of increased transmission not yet shown by current evidence should be mitigated by wearing FFP3 masks.

Both schools have faults. The Resuscitation Council’s advice may lead to trusts discouraging staff from starting CPR because of shortages of FFP3 masks, while PHE’s advice may put staff at risk and is strongly opposed by the BMA. Intriguingly, PHE’s advice first included CPR as an AGP then omitted reference to it before stating its current position, leading some to suggest any changes were motivated by a desire to ration PPE.

Amid widespread local variation, staff with a dissenting opinion to their trust have been left in the lurch. Last month, the International Liaison Committee on Resuscitation’s pre-publication systematic review strongly supported the Resuscitation Council’s position. Since the government’s scientific advice relied on the older review, it remains to be seen whether PHE will take this new evidence into account.

Competing interests: None declared.

Full response at: https://www.bmj.com/content/368/bmj.m1282/r-1

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