

Use of three-dimensional technology in tracheal intubation: an alternative to minimize the contamination risk by COVID-19

Uso da tecnologia tridimensional na intubação traqueal: uma alternativa para minimizar o risco de contaminação por COVID-19

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Dear Editor,

Because of the spreading of acute respiratory syndrome coronavirus (SARS-CoV-2) the use of personal protective equipment was adopted by whole-population and, within a short period of time, these medical supplies became scarce and expensive, therefore leading to a severe global crisis, mainly in health services. Based on this scenario, rapid and low-cost methods are required to stop the virus spread.^(1,2)

Three-dimensional printing has enabled the production of equipment such as videolaryngoscope systems in a timely fashion and with low cost.⁽²⁾ Videolaryngoscopy makes tracheal intubation more successful.⁽³⁾ In addition, in COVID-19 cases this equipment may increase the distance between the providers and the patients airways, facilitate the interventions of health care professional, reduce duration of procedure, and minimize the contamination.⁽³⁻⁵⁾

In cases of the collapse of the health resources, such in COVID-19 pandemic, the three-dimensional printing technology may be an efficient and low-cost alternative, particularly in countries with limited resources.

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