

Letter to the Editor: Use of Dental Radiography in the COVID-19 Pandemic

Journal of Dental Research

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DOI: 10.1177/0022034520923323

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We wish to discuss the recommendation of dental panoramic radiographs (DPRs) and cone beam computed tomography (CBCT) scans being prioritized over intraoral radiography in patients with COVID-19 (Meng et al. 2020).

Patients requiring intervention for dental emergencies, as outlined by Hurley and Neligan (2020), should be comprehensively risk assessed for COVID-19 and managed in dedicated clinics. Such patients will likely require relevant imaging, and dental intraoral radiography has many advantages. With a mobile (or handheld) dental x-ray unit (Berkhout et al. 2015), it can be performed on supine patients in hospital wards. Additionally, DPR and CBCT equipment usually requires the patient to stand or sit motionless for the duration of the exposure, which can be up to 40 s for some CBCT equipment (Nemtoi et al. 2013). For an acutely ill patient, this may be challenging.

COVID-19 person-to-person transmission can occur through respiratory droplets (Peng et al. 2020; World Health Organization 2020a). Concerns of aerosol generation through coughing induced from intraoral film holders should be addressed by following COVID-19 infection control guidance, including use of appropriate personal protective equipment for dental practitioners and radiography staff (World Health Organization 2020b).

Intraoral radiography offers the best diagnostic efficacy; however, a sectional DPR would be reasonable in an emergency setting for the majority of conditions, especially in patients who may not tolerate intraoral films. CBCT, however, is not an alternative to intraoral radiography because of lower resolution, artifacts from movement and metallic restorations, as well as a much higher radiation dose (Theodorakou et al. 2012).

Acknowledgments

The authors received no financial support and declare no potential conflicts of interest with respect to the authorship and/or publication of this article.

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