Possible aerosol transmission of COVID-19 and special precautions in dentistry
Ge ZY, Yang LM, Xia JJ, et al. J Zhejiang Univ Sci B. 2020 May;21(5):361-368. doi: 10.1631/jzus.B2010010. Epub 2020 Mar 16.

ABSTRACT
Since its emergence in December 2019, corona virus disease 2019 (COVID-19) has impacted several countries, affecting more than 90 thousand patients and making it a global public threat. The routes of transmission are direct contact, and droplet and possible aerosol transmissions. Due to the unique nature of dentistry, most dental procedures generate significant amounts of droplets and aerosols, posing potential risks of infection transmission. Understanding the significance of aerosol transmission and its implications in dentistry can facilitate the identification and correction of negligence in daily dental practice. In addition to the standard precautions, some special precautions that should be implemented during an outbreak have been raised in this review.

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Use of mouthwashes against COVID-19 in dentistry
Vergara-Buenaventura A, Castro-Ruiz C. Br J Oral Maxillofac Surg. 2020 Oct;58(8):924-927. doi: 10.1016/j.bjoms.2020.08.016. Epub 2020 Aug 15.

ABSTRACT
The proximity to the patient during dental care, high generation of aerosols, and the identification of SARS-CoV-2 in saliva have suggested the oral cavity as a potential reservoir for COVID-19 transmission. Mouthwashes are widely-used solutions due to their ability to reduce the number of microorganisms in the oral cavity. Although there is still no clinical evidence that they can prevent the transmission of SARS-CoV-2, preoperative antimicrobial mouth rinses with chlorhexidine gluconate (CHX), cetylpyridinium chloride (CPC), povidone-iodine (PVP-I), and hydrogen peroxide (H2O2) have been recommended to reduce the number of microorganisms in aerosols and drops during oral procedures. This paper therefore aims to provide a comprehensive review of the current recommendations on the use of mouthwashes against the COVID-19 pandemic and to analyse the advantages and disadvantages of most conventional antiseptic mouthwashes used in dentistry.

What dentists need to know about COVID-19
Baghizadeh Fini M. Oral Oncol. 2020 Jun;105:104741. doi: 10.1016/j.oraloncology.2020.104741. Epub 2020 Apr 28.

ABSTRACT
This article aims at collecting all information needed for dentists regarding the COVID-19 pandemic throughout the world by reviewing articles published by now. In late 2019, a pneumonia outbreak of uncertain etiology happened in Wuhan, China. There were many reports related to a live-animal and seafood market, supporting that the pathogens were transferred from animals to humans, rapidly evolving into transmission from human to human. The pathogen was classified as 2019 Novel Corona Virus (2019-nCoV), and the disease was named Corona Virus Disease 2019 (COVID-19). Given that COVID-19 has lately been detected in infected patients' saliva, the COVID-19 outbreak is an alert that all dental and other health professionals must be vigilant in defending against the infectious disease spread, and it may enable to assess whether non-invasive saliva diagnostic for COVID-19. There has so far been no evidence from randomized controlled trials to prescribe any particular anti-nCoV treatment or vaccine, and COVID-19 management has been widely supportive. Since the ACE-2 was expressing on oral cavity mucosa, there is a potentially huge COVID-19 infectious vulnerability risk for oral cavity and brought up a proof for the future prevention procedure in dental practice and daily life. As a result, the whole dental teams should be vigilant and keep patients and themselves in a safe environment by following the guideline in this study.

COVID-19 and dentistry: prevention in dental practice, a literature review
Villani FA, Aiuto R, Paglia L, Re D. Int J Environ Res Public Health. 2020 Jun 26;17(12):4609. doi: 10.3390/ijerph17124609.

ABSTRACT
SARS-CoV-2 is a member of the family of coronaviruses. The first cases were recorded in Wuhan, China, between December 2019 and January 2020. Italy is one of the most affected countries in Europe. COVID-19 is a new challenge in modern dentistry. New guidelines are...
required in dental clinics to avoid contagion caused by cross-infections. A narrative review was performed using both primary sources, such as scientific articles and secondary ones, such as bibliographic indexes, web pages, and databases. The main search engines were PubMed, SciELO, and Google Scholar. Twelve articles were selected to develop the bibliographic review by applying pre-established inclusion and exclusion criteria. Precautionary measures should be applied to control COVID-19 in clinical practice. Several authors have highlighted the importance of telephone triage and/or clinical questionnaires, body temperature measurement, usage of personal protective equipment, surface disinfection with ethanol between 62% and 71%, high-speed instruments equipped with an anti-retraction system, four-handed work, and large-volume cannulas for aspiration. Clinically, the use of a rubber dam is essential. FFP2 (or N95) and FFP3 respirators, if compared to surgical masks, provide greater protection for health workers against viral respiratory infections. Further accurate studies are needed to confirm this.

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COVID-19 pandemic-a focused review for clinicians
Cevik M, Bamford CGG, Ho A. Clin Microbiol Infect. 2020 Jul;26(7):842-847. doi: 10.1016/j.cmi.2020.04.023. Epub 2020 Apr 25.

ABSTRACT
The COVID-19 pandemic caused by SARS-CoV-2 remains a significant issue for global health, economics and society. A wealth of data has been generated since its emergence in December 2019, and it is vital for clinicians to keep up with this data from across the world at a time of uncertainty and constantly evolving guidelines and clinical practice.

Objectives
Here we provide an update for clinicians on the recent developments in the virology, diagnostics, clinical presentation, viral shedding, and treatment options for COVID-19 based on current literature.

Sources
We considered published peer-reviewed papers and non-peer-reviewed pre-print manuscripts on COVID19 and related aspects with an emphasis on clinical management aspects.

Content
We describe the virological characteristics of SARS-CoV-2 and the clinical course of COVID-19 with an emphasis on diagnostic challenges, duration of viral shedding, severity markers and current treatment options.

Implications
The key challenge in managing COVID-19 remains patient density. However, accurate diagnosis as well as early identification and management of high-risk severe cases are important for many clinicians. For improved management of cases, there is a need to understand test probability of serology, qRT-PCR and radiological testing, and the efficacy of available treatment options that could be used in severe cases with a high risk of mortality.

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COVID-19 transmission in dental practice: brief review of preventive measures in Italy
Izzetti R, Nisi M, Gabriele M, Graziani F. J Dent Res. 2020 Aug;99(9):1030-1038.

doi: 10.1177/0022034520920580. Epub 2020 Apr 17.

ABSTRACT
The outbreak and diffusion of SARS-CoV-2, responsible for the coronavirus disease (COVID-19), has caused an emergency in the health system worldwide. After a first development in Wuhan, China, the virus spread in other countries, with Italy registering the second highest number of cases in Europe on the 7th of April 2020 (135,586 in total). The World Health Organization declared the pandemic diffusion of COVID-19, and restrictive measures to limit contagion have been taken in several countries. The virus has a predominantly respiratory transmission through aerosol and droplets. The importance of infection control is therefore crucial in limiting the effects of virus diffusion. We aim to discuss the risks related to dental practice and current recommendations for dental practitioners. A literature search was performed to retrieve articles on the management of COVID-19 diffusion in dental practice. The documented clinical experience, the measures of professional prevention, and the actual Italian situation were reported and described. Four articles were retrieved from the literature search. Among the eligible articles, 3 reported measures to contrast COVID-19 diffusion. The infection management protocols suggested were reviewed. Finally, recommendations based on the Italian experience in terms of patient triage, patients’ entrance into the practice, dental treatment, and after-treatment management are reported and discussed. COVID-19 is a major emergency worldwide, which should not be underestimated. Due to the rapidly evolving situation, further assessment of the implications of COVID-19 outbreak in dental practice is needed.

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