ISSN-E: 1990-7990 RNPS:2008
Univ Méd Pinareña. May-August 2020; 16(2):e496

LETTER TO THE DIRECTOR

Risk of infection by SARS-CoV-2 in dentist

Riesgo de contagio por SARS-CoV-2 en estomatólogos

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Received: April 27, 2020 | **Accepted:** April 29, 2020 | **Published:** May 01, 2020

Cited as: Iglesias-Osores S, Saavedra-Camacho JL. Riesgo de contagio por SARS-CoV-2 en estomatólogos. Univ Méd Pinareña [Internet]. 2020 [citado: Fecha de Acceso];16(2):e496. Disponible en: http://www.revgaleno.sld.cu/index.php/ump/article/view/496

Mr. director:

The continuing outbreak of acute respiratory disease that was recently named Coronavirus disease2019 (COVID-19), It was recognized in December 2019; it is characterized as a highly infectious disease and is caused by the SARS-CoV-2 virus. This outbreak has become a pandemic due to its rapid spread around the world, consequently preventive measures have been implemented to address the risk of infection of the population.

The most common routes of transmission of SARS-CoV-2 include direct transmission (droplet inhalation transmission) and contact transmission (contact with oral, nasal and ocular mucous membranes)[(1)]. As SARS-CoV-2 can be transmitted directly from one person to another via micro-droplets of Flügge, it is suggested that it can also be transmitted via fomites[(2)]. In addition, the asymptomatic incubation period for SARS-CoV-2 infected persons was reported to be 1-14 days, and after 24 days persons without symptoms can transmit the virus[(3)].

By working directly in the oral cavity and being in contact with the mucous membranes, dentists present a very high risk of infection. Infection control measures are necessary to prevent the virus from spreading further and to help control the epidemic situation.

From the time when the viral load contained in human saliva is very high and antiseptic mouthwashes can only reduce the amount of infection, but cannot eliminate the virus in the saliva; meeting biosecurity standards and using means of protection require vital attention.

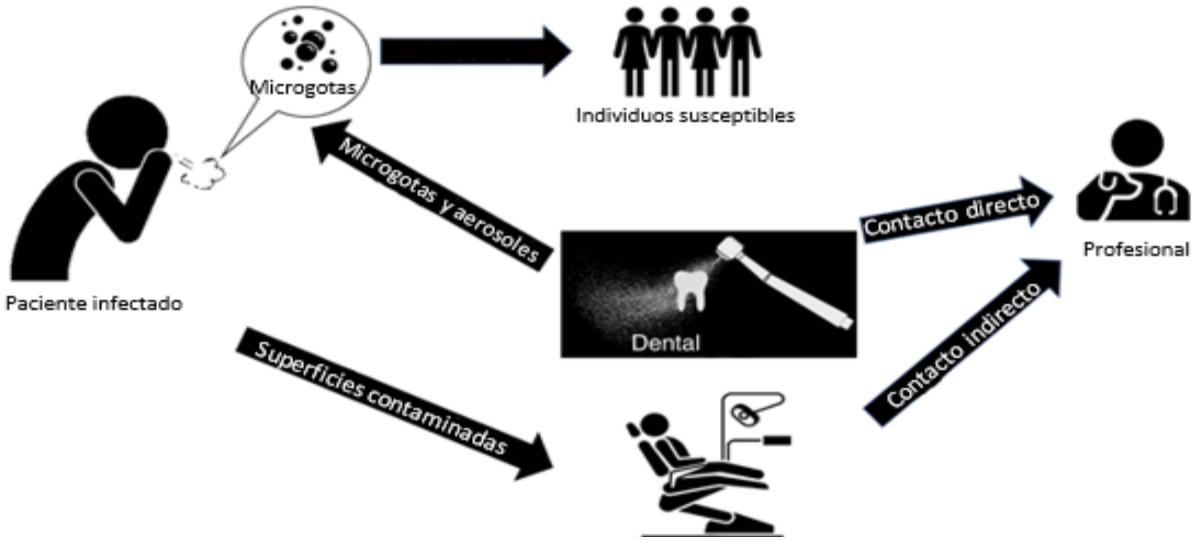
Before performing a procedure, it is recommended that the mouthwash containing oxidizing agents such as 1 % hydrogen peroxide or 0,2 % povidone-iodine can be used to reduce the microbial load in saliva, including possible transport of SARS-CoV-2. In addition, the use of personal protective equipment including protective glasses (goggles), surgical masks, disposable latex gloves, hats, face shields, protective clothing, and a waterproof shoe cover is necessary during the epidemic period[(4)].

The most recommended guidelines indicate that dentists should avoid scheduling procedures; only treating dental emergencies during the outbreak of COVID-19. This action will drastically limit interpersonal contact, waiting time of patients in dental offices and, in general, the conditions that predispose patients to infection (Figure 1).

When dentists treat patients, they should assess all patients as potentially infected. It is useful to intercept the potentially infected person before they reach the operating areas; an example of this is patients with fever > 37,5 °C. Similarly, asking a few questions about the general health status of the

ISSN-E: 1990-7990 RNPS:2008
Univ Méd Pinareña. May-August 2020; 16(2): e496

patient in the last 7 days and about the risk of having been in contact with other infected people is a useful and recommended action[5].



Source: Peng X, Xu X, Li Y, Cheng L, Zhou X, Ren B. Transmission routes of 2019-nCoV and controls in dental practice. Int J Oral Sci. 2020; 12(1):1-6

Figure 1. Transmission routes of 2019-nCoV in dental clinics and hospitals

The practice of management of the operating area should be quite similar to that of other patients affected by infectious and highly contagious diseases. As often as possible, personnel should work at an appropriate distance from patients; in addition, hand pieces should be equipped with anti-reflux devices to prevent contamination and reduce the amount of aerosol produced in the environment. In conclusion, policies should be implemented in daily practice to prevent and control COVID-19 infection in diagnosis and treatment by the dentistry staff.

CONFLICT OF INTERESTS

The autors declare that does not exist an interest conflicts

AUTHORSHIP CONTRIBUTION

All the authors participated in the writing and review of the article; as well as its concluding version.

FINANCING

The authors did not receive funding for the writing of this article

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