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ARTICLE AIM

Provide a reference for preventing the transmission of the novel β -coronavirus (2019-nCoV) through infection-control measures during dental diagnosis and treatment.

BACKGROUND INFORMATION

Since December 2019, the 2019-nCoV has caused the outbreak of pneumonia in Wuhan and spread quickly throughout China and further 24 countries. 2019-nCoV shows a high affinity for the human cell receptor ACE2, which is found in blood, saliva, and other body fluids and can be transmitted from person-to-person through direct and in-direct contact (e.g. contact with mucous membranes, droplet inhalation, or contact with a contaminated surface). Since dental treatments require close contact with the patient and frequent exposure to saliva, blood and other bodily fluids, dental practices have an increased risk of transmitting 2019-nCoV and a large number of infections of medical staff have been reported by mid-February 2020.

RECOMMENDED INFECTION-CONTROL MEASURES TO REDUCE THE RISK OF TRANSMISSION

- Patient evaluation by screening questionnaire and body temperature measurement.
- Reinforcement of the hand-washing compliance following the applicable hand hygiene guidelines.
- Personal protective measures for dental staff by wearing suitable protective equipment and clothing.
- Antimicrobial mouth rinsing before dental procedures.
- Rubber dam isolation to minimize the production of saliva- and blood-contaminated aerosol or spatter.
- Use of an anti-retraction hand-piece as preventive measure for cross-infection.
- Effective and rigorous disinfection measures in clinic settings and public area.
- Correct medical waste management according to current rules.

CONCLUSION

The article reviewed detailed practical strategies to block virus transmission of 2019-nCoV during dental diagnosis and treatment. An important infection control measure is the use of rubber dam. Rubber dam isolation can significantly reduce airborne particles in ~3-foot diameter of the operational field by 70% and can minimize the production of saliva- and blood-contaminated aerosol or spatter.

FURTHER INFORMATION



<https://www.coltene.com/science/treatment-auxiliaries/dental-dam/>



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