

- Dental care / Virus

## Oral health and COVID-19

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It's possible that the health of your teeth, gums and mouth may be connected to COVID-19. How is that? A study done just this year suggests that poor oral health may lead to infection from the SARS-CoV-2, the severe acute respiratory syndrome coronavirus 2 that causes the new coronavirus disease 2019 or COVID-19.

The study notes that the mouth can act as an entry point for SARS-CoV-2. This is due to the cells in the tongue, gums and teeth; the cells have angiotensin-converting enzyme-2 (ACE2). This is the protein receptor that allows the COVID-19 virus to enter the cells. The presence of ACE2 receptors appears to be higher among those with the COVID-19 disease.

The U.S. Centers for Disease Control and Prevention considers oral health as an important part of overall health and wellbeing.

That is, access to dental care is important in reducing the early stages of oral diseases.

Except for emergency cases, the pandemic has reduced the opening and closure hours of dental clinics, limiting access to routine care. This may lead to oral health issues such as less attention to oral hygiene.

Poor oral hygiene, for example, may lead to the accumulation of bacteria that stick to the teeth and form what dentists call plaque. Plaque is a common cause of gingivitis, or inflammation of the gums.

The symptoms of gingivitis are red, swollen gums; bleeding gums when brushing or flossing; bad breath; and an unpleasant taste in the mouth.

It is likely that the limitations imposed by health protocols discourage many people to take care of their oral hygiene. Inattention to this important health care may lead dental plaque to grow, which increases the risk of gingivitis.

Another article has observed the possible connection between gum disease and changes in dental plaque, increasing the risk of complications from COVID-19.

Other issues are involved here. Researchers also suggest that a lack of oral hygiene can increase the possibility of bacteria moving from the mouth to the lungs, increasing the risk of developing a bacterial infection in addition to COVID-19.

It is possible, as some researchers suggest, that bleeding gums may be a symptom of COVID-19. They observed that symptoms of gingivitis were reduced after COVID-19 subsided.

That is not to be accepted at face value – literally – as those observations are based on a study of just three people. More research is clearly in order to confirm the observations.

There are observations too that dry mouth may be an early symptom of COVID-19. Dry mouth, or xerostomia, occurs when there is inadequate saliva to keep the mouth moist. The condition makes it difficult to break down food, wash food particles away from the mouth and swallow food.

Dry mouth was one of the most common oral symptoms reported by 108 people with COVID symptoms in a study published in *The Lancet*.

The reasons are still unclear to science. It could be that the coronavirus infects and damages the salivary glands. Or it could be the result of COVID-19 treatment or plain and simple poor oral hygiene.

Dry mouth is not just an inconvenience, as we have seen in the difficulty to masticate and swallow food. Left untreated, dry mouth also increases the risk of tooth decay and mouth infection. Secondary issues may arise because, like viral infections, coronavirus infections compromise the immune system.

Some COVID-19 survivors have reported ulcers in the mouth. These can be observed as a white patch on the tongue, gums or roof of the mouth. However, the link has not been confirmed.

The American Dental Association reports that dentists have observed a 59 percent increase in teeth grinding, or bruxism. It could be that it has resulted in a 53 percent increase in chipped and cracked teeth since the start of the pandemic.

Higher anxiety levels during the pandemic may lead to more people grinding their teeth unconsciously. Poor posture during workfrom-home can cause people to clench their jaws and grind their teeth.

What happens is that the increased pressure of grinding weakens the teeth and makes them more prone to crack.

There have been reports observing more cracked teeth among COVIDpositive patients in intensive critical care, such as those who need ventilators.

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