Findings that COVID can infect the mouth shouldn't disrupt your dental care

April 12 2021, by Helene Ragovin

Credit: Unsplash/CC0 Public Domain

Scientists recently discovered that the SARS-CoV-2 virus—the culprit behind COVID—can specifically infect cells in the mouth and may travel in saliva. That news, while promising for future research, doesn't

translate to big changes in the precautions already being taken to prevent the spread of the virus at the dentist office, and definitely shouldn't make people think twice about visiting their dentist, say faculty at Tufts University School of Dental Medicine.

Since the start of the pandemic, dental offices have been successful in minimizing contagion. "In dentistry, we're well-positioned to handle this," says Associate Professor Vidya Sankar, division director of oral medicine. These recent findings should not deter people from showing up for routine exams, cleanings, and oral-cancer screenings. "Yes, still come in for your checkups," says Assistant Professor Tanya Wright, assistant division director of oral and maxillofacial pathology.

In a study published March 25 in the journal *Nature Medicine*, a team of researchers found evidence that the virus can infect cells in the salivary glands and lining of the oral cavity, and that saliva could play a role in transmitting the virus to other parts of the body, such as the lungs or digestive system. The findings could also help explain why some COVID patients suffer from symptoms like loss of taste, dry mouth, and oral blisters.

"It's not surprising they were able to isolate SARS-CoV-2 in the oral environment," says Sankar. "This is not the first infectious agent to be transmitted easily through the oral cavity and saliva." Anyone old enough to remember going to the dentist before the 1980s witnessed the increase in infection control measures—most noticeably, gloves and masks for the dental team—brought about by the HIV crisis. Other viruses, such as HPV and herpes, can be present in oral epithelial tissues as well, says Sankar. Even a patient with cold sores or strep throat poses the risk of contagion, says Wright.

Unlike HIV or HPV, COVID is able to remain suspended in airborne particles following aerosol-generating dental procedures—such as

drilling or using an air or water syringe. That's where additional infection control measures that dental offices instituted at the start of the pandemic come in—think N95 masks, face shields, additional air-filtering devices, and plastic barriers surrounding dental operatories. The logistics of a visit to the dentist changed swiftly and drastically as dentistry added this COVID-specific layer of infection control to its already strict protocols.

There's hope this new information will help researchers devise additional methods to curb COVID transmission—but doesn't signal the need for any immediate or sweeping changes.

"We in the dental field have responded well, and the data shows we responded well," says Sankar. A study from the American Dental Association, for example, estimated that as of June 2020, the COVID rate among dentists was less than 1 percent.

The Tufts dentists stress that the benefits of preventive care and cancer screenings outweigh any hesitancy over COVID—not just for dental visits, but all health care. "The big news is how many patients have been putting off cancer screenings such as mammograms, which delay diagnosis of breast cancer," says Sankar. "In the same way, routine dental care allows for the screening for oral, head, and neck cancers, early detection, and follow-up."

Wright, who examines thousands of oral tissue biopsies annually through the Tufts Oral Pathology Service, points out that the service remained open throughout 2020, and that malignant diagnoses did not pause because there was a pandemic going on. "We're hoping to save lives," she says. "We're in the business of preventive care and catching things early."

More information: Cameron G. Estrich et al. Estimating COVID-19

prevalence and infection control practices among US dentists, *The Journal of the American Dental Association* (2020). DOI: 10.1016/j.adaj.2020.09.005

SARS-CoV-2 infection of the oral cavity and saliva, *Nature Medicine* (2021). DOI: 10.1038/s41591-021-01296-8

Provided by Tufts University