

A review of oral fluid noninvasive methods for detection of Covid 19

Aida Karagah and Maryam tofangchiha

Qazvin University of Medical Sciences, Iran



Abstract

At the present time, understanding the pathophysiology of coronavirus disease (Covid-19) pandemic has been the main challenge and global health crisis for the world. Rapid and precise diagnosis of Covid-19 is critical in controlling the outbreak in the community. The established gold standard of nasopharyngeal swab (NPS) sampling requires close contact between healthcare workers which poses a risk of transmission of the virus to health care professionals and, causes discomfort and may cause bleeding, especially in patients with a condition such as thrombocytopenia. The oral cavity has been touted as one of the most significant points of entry of the novel coronavirus and may play an active role in the pathogenesis of Covid-19 owing to its location in confluence with the respiratory tract, as well as the drainage of saliva, predisposes it to be a major focus of interest. Saliva specimens can be used in screening and diagnostic tools for respiratory viruses as well as monitoring of systemic health and to make significant clinical decisions for patient care. However, saliva is not the only fluid present in the oral cavity.

The gingival crevicular fluid being demonstrative of systemic status and having an established track record of detecting viruses and biomarkers forms a logical basis for evaluating the presence of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The research in the field of salivaomics has a key role in identifying biomarkers and exploring the role of saliva and GCF in diagnosis of diseases to develop rapid chair side tests for the detection of Covid-19 and it is also crucial to improve and develop effective strategies for prevention. In light of this knowledge, the demonstration of SARS-CoV-2 in saliva and GCF is significant finding that goes a long way in understanding the Covid-19 infection and how it relates to oral health and the practice of dentistry.

Biography

Aida Karagah has completed oral and maxillofacial surgery from Shiraz University of Medical Sciences, Iran. She has been working as an assistant professor oral and maxillofacial surgery department Qazvin dental school. She has published scientific articles in reputed journals H-index is 8 and has been serving as an editorial board member of reputed Journals.

