Can saliva be used to test for antibodies to SARS-CoV-2?

A non-invasive test for mucosal and systemic antibody responses may be an effective way of population screening for humoral immunity against SARS-CoV-2 infection. A pre-peer reviewed publication in medRxiv compares IgG and IgA antibodies in serum (n=496) and saliva (n=90) from acute and convalescent patients ranging from 3-115 days post-symptoms. Both IgG and IgA levels to SARS-CoV-2 peak from 16-30 days after symptoms, but levels of IgA antibodies rapidly decayed thereafter. However, IgG levels persisted for up to 115 days after symptoms in both serum and saliva, and significantly correlated with each other. The authors conclude that “IgG responses both at the site of infection and systemically in COVID-19 patients suggest that saliva could be used as an alternative …… for monitoring IgG to SARS-CoV-2 spike and RBD antigens.” The authors go on further to conclude that the systemic and mucosal IgG response persists for up to three months after onset of symptoms, but not IgA – which rapidly wanes after peaking in the first month.

Isho et al., Pre-Print. Evidence for sustained mucosal and systemic antibody responses to SARS-CoV-2 antigens in COVID-19 patients. MedRxiv

Summary by Clive Gray