Midnasal swab done by patient at home detects SARS-CoV-2

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(HealthDay)—For detection of severe acute respiratory syndrome

coronavirus 2 (SARS-CoV-2) in symptomatic patients, unsupervised home midnasal swab collection is comparable to clinician-collected nasopharyngeal swab collection, according to a research letter published online July 22 in *JAMA Network Open*.

Denise J. McCulloch, M.D., M.P.H., from the University of Washington in Seattle, and colleagues compared unsupervised home self-collected swabs to clinician-collected nasopharyngeal swabs for COVID-19 diagnosis in 185 participants. Participants were recruited from symptomatic outpatients testing positive for SARS-CoV-2 and symptomatic health care workers, who were provided test kits for unsupervised home collection of a midnasal swab.

The researchers found that 22.2 percent of the participants yielded SARS-CoV-2 positive test results via the clinician-collected swab, home self-collected swab, or both. One hundred fifty-eight of the participants were health care workers and 9 percent of these participants tested positive. The sensitivity and specificity of home swabs were 80.0 and 97.9 percent, respectively, compared with clinician swabs. There was a positive correlation seen for cycle thresholds (a semiquantitative measure of viral load) of home swabs with clinician swabs. Sensitivity of home swabs was 95 percent in a sensitivity analysis of all swabs with a cycle threshold less than or equal to 32.

"As societies reopen, expansion of testing is critical for preventing a global resurgence in COVID-19," the authors write. "Home swab collection has the potential to play a pivotal role in increasing testing access across the broader population."

Several authors disclosed financial ties to the pharmaceutical industry.

More information: Abstract/Full Text