COVID-19 nasal swab test may not be best for those who've had sinus surgery

4 March 2021, by Will Sansom

"Not one site of the 200 we searched online had information cautioning against blind nasopharyngeal swab testing in those with a history of sinus or skull base surgery," he said.

Asked how often swabbing is done incorrectly, Dr. Chen said, "We really don't know that. But in a review of videos online by Higgins, et al., the authors found that about half of the videos on how to perform COVID-19 nasopharyngeal swabs were incorrect."

Issues include incorrect angling of the swab and inappropriate depth of insertion. If the swab angle is too high, a puncture may occur. The sinuses can protect the skull base to a degree, Dr. Chen said.

Injury from incorrect nasopharyngeal swab technique, while rare, may include cerebrospinal fluid leakage or severe bleeding.

Polymerase chain reaction via nasopharyngeal swabs is a test frequently used to detect SARS-CoV-2 infection.

Dr. Chen is a board-certified, fellowship-trained rhinologist—the only fellowship-trained physician of this rare specialization in San Antonio. Rhinologists are ear, nose and throat (ENT) subspecialists who have unique interest and expertise in medical and surgical treatment of nasal and sinus disorders.


Online information about COVID nasopharyngeal swabs lacks information warning those with prior extensive sinus or skull base surgery, Dr. Chen said.

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.