

March 27: COVID-19 Clinical Update

Asymptomatic Transmission and Guidance for Patients with Anosmia

To facilitate the sharing of important clinical information during the COVID-19 healthcare crisis and to help respond to questions from physicians across the health system, Northwestern Medicine has implemented a new daily communication for physicians – the COVID-19 Clinical Update. This resource will provide the most current recommendations for the care and treatment of patients with suspected or confirmed COVID-19 infection, as well as guidelines to help contain the spread and keep you, your staff and your patients safe.

In today's issue, you will find information regarding asymptomatic transmission of COVID-19, as well as research and guidance on the loss of smell – anosmia – as an early symptom of COVID-19 infection and how to assess this symptom when caring for patients.

ASYMPTOMATIC TRANSMISSION

The exact extent of asymptomatic transmission is not fully understood. However, some studies indicate that the virus is detected in the respiratory tract 1-2 days before the onset of symptoms, and can persist for 8 days for milder cases and up to 37 days in patients with serious disease requiring ICU level care. Based on mathematical modeling, estimates suggest a period of time prior to onset of symptoms when transmission is most likely to occur. Of note, patients with asymptomatic infection have similar viral loads as seen in symptomatic cases.

GUIDANCE FOR PATIENTS WITH ANOSMIA

The sense of smell is very complex and is conveyed through specialized nerve cells in the nose. The sense of taste is comparatively simple and is conveyed through taste cells in the mouth. Taste consists only of sweet, sour, salty, bitter and umami. Smell – or olfaction – is far more complex, but the two combine to provide the flavor of food. The sense of taste is almost never damaged and is quite resistant to injury, whereas the sense of smell is much more delicate. Patients often confuse the terms taste and flavor, using them interchangeably, but patients complaining of taste loss usually mean flavor, and formal examination and testing almost always indicate smell loss only. Nevertheless, food is bland.

Typical viral upper respiratory infections, such as the common cold, can cause smell and, therefore, flavor loss. Mild smell loss – or anosmia – occurs with nasal congestion associated with viral infections such as the common cold, but it may be barely noticeable and patients

typically do not complain. Rarely – in less than 1/100,000 cases – ordinary upper respiratory tract infections will result in significant and severe loss of smell and flavor.

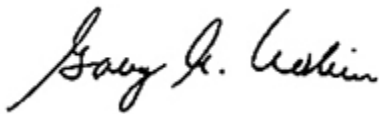
For COVID-19, anecdotal reports suggest that smell loss and flavor loss are much more common. Data from China suggest about 6% of patients with COVID-19 experience these symptoms. A study from Korea, which was a telephone interview of 3,191 COVID-positive patients, indicate that about 15% had problems with smell and flavor. Interviewers asked about taste loss as well as smell loss to address common confusion between the two. None of these patients were formally tested in person, but loss of smell was described as fairly severe.

Some of the anecdotal reports and studies suggest that loss of smell appears to be common in younger patients, often being the only sign of COVID-19. Consequently, acute loss of smell or flavor should raise the suspicion for COVID-19 infection, and patients should self-isolate and assume they have the virus. Acute, idiopathic smell loss does occur even in absence of typical viral infections but is rare. Awareness by physicians and patients may reduce the number of otherwise asymptomatic patients who spread the virus.

We currently don't know whether the loss of smell is permanent, but anecdotal evidence suggests that patients will recover. There is no specific treatment for any viral-induced smell loss, but olfactory training is an option. This is the sequential stimulation of the sense of smell with aromatic oils, and a simple kit can be ordered online.

Additional clinical and patient treatment resources can be found on the COVID-19 pages on [Physician Forum](#) and [NMI](#). Remember, these resources are updated regularly, so please bookmark these pages and visit them frequently.

Thank you for your dedication to providing care to our patients and supporting each other during this challenging period. As this healthcare crisis evolves, we will continue to provide you with the most current information through this daily COVID-19 Clinical Update, as well as monitor your questions submitted to COVID-19MD@nm.org to help inform future communications.



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