



International Journal of Medical and All Body Health Research



International Journal of Medical and all body Health Research

ISSN: 2582-8940

Received: 01-11-2020; Accepted: 02-12-2020

www.allmedicaljournal.com

Volume 1; Issue 4; October-December 2020; Page No. 46-47

Anosmia as olfactory impairment in patients with COVID-19

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Latter to Editor

Introduction

Now that we are facing the epidemic of COVID-19, we must pay attention to the smallest symptoms that help in the diagnosis of COVID-19 patients in order to prevent its further spread with early diagnosis and treatment. One of the symptoms reported by patients is the loss of the sense of smell which usually happens suddenly and gives a bad feeling to the patient, but it can be of great help in diagnosing COVID-19. We know that severe hyposmia, or diminished sense of smell, and anosmia, or complete loss of smell, both have an impact on quality of life (1).

Abrupt loss of taste or smell, however, can be a helpful diagnostic tool for COVID-19 if it is associated with an ongoing or recent viral upper respiratory infection (2). That being said since olfactory impairment can also be present in allergic rhinitis, it is not always indicative of a viral infection (3). Therefore, according to the season of patients' referrals, differential diagnosis should be considered, but during an epidemic, the priority and suspicion should be on COVID-19 so that additional measures can be taken to definitively diagnose COVID-19 on the patient. Anosmia, a COVID-19 neurologic complication akin to olfactory dysfunction, has been documented in a large number of patients (4).

Changes in the sustentacular cells within the nasal epithelium due to inflammation may be the cause of temporary anosmia rather than a direct injury to the olfactory neurons (5). For anosmia patients who underwent objective olfactory testing, full recovery was noted after several months (6). It means that anosmia is a long-term complication some times but almost patients report the recovery by some weeks. In other word, several months may pass after an acute COVID-19 infection in some patients, along with additional neurologic or systemic symptoms such as anosmia and dysgeusia (7). Persistent systemic and neurologic symptoms may also be experienced by those who had milder acute COVID-19 symptoms but did not require hospitalization for hypoxemia or pneumonia (8).

Frequent neurologic symptoms that can interfere with day-to-day functioning include paresthesia, headaches, dysgeusia, anosmia, myalgia, dizziness, blurred vision, and tinnitus. More than four weeks after the initial infection, persistent neurologic symptoms may be linked to the "long COVID" syndrome (9). Some COVID-19 hospitalized patients report ongoing symptoms weeks or years after the acute infection. Persistent systemic and neurologic symptoms can also occur in patients with milder acute COVID-19 symptoms who never required hospitalization for hypoxemia or pneumonia. Cognitive impairment, headaches, paresthesias, myalgia, dysgeusia, and asthenia are common (10). The presence of certain symptoms, such as the lack of sense of smell due to the symptom not being vague, is very helpful in making a definitive diagnosis, and it is better to ask patients who refer to the emergency department.

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