

Rapid Recovery in Loss of Taste and Smell with Doxycycline in Patients with COVID-19

COVID-19 Hastalarında Doksisisiklin ile Tat ve Koku Kaybında Hızlı İyileşme

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Dear Editor,

Covid-19 is a viral multisystemic disease that caused a worldwide pandemic in 2020 [1]. Due to the rapidly increasing number of cases, medical doctors in many countries of the world, regardless of their specialties, took part in the treatment of COVID-19 patients. Almost all physicians have served in pandemic control including dermatologists, neurosurgeons, pathologists and ENT (ear, nose and throat) surgeons. While lung involvement is the most common serious manifestation of the disease, coronavirus (COVID-19) can lead to multiple organ injuries. It has been reported that a significant number of COVID-19 patients appear to have loss of smell (anosmia) and taste (dysgesuia). These symptoms usually improve within four weeks, but there are cases whose symptoms last up to 3 months [2,3].

Doxycycline is a broad-spectrum tetracycline-class antibiotic. In addition to its antibacterial effects, doxycycline also has anti-inflammatory, antioxidative and immunomodulatory activities. In COVID-19 disease, where there is no specific therapeutic agent, doxycycline has been one of the repurposing agents that come to mind, considering their antibacterial and antiinflammatory and immunomodulatory effects.

Doxycycline has been reported to improve loss of taste and smell within 2-7 days, a distressing symptom of COVID-19 that does not improve for weeks in most patients [4,5]. We observed that the loss of taste and smell improved in 2-5 days with doxycycline treatment in 6 Covid-19 patients unexpectedly, who were followed up at home. The patients were four middle-aged adults in three and fourth decades and two elderly persons over the age of 65 .

Patients with positive PCR tests and lung involvement with various degree were followed up with favipiravir ,aspirin and doxycycline instead of azithromycin because of arrhythmia concerns due to their medical history.. Doxycyclin is already known to be effective especially in RNA virus infections due to its antiinflammatory effect..The rapid recovery of the loss of taste and smell may be due to that doxyxcycline has restructured the sensory neuroepithelium disrupted by inflammation. [4].Doxycycline, whose effectiveness against Covid-19 has been shown by various studies, can be a considerable therapeutic option, regarding that it may also improve loss of taste and smell that is very distressing symptom. Outpatients with COVID-19 who would need antibiotic could be given doxyxcycline to gain additional clinic benefit

References

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