

Covid-19 Hastalığına Nörolojik Açıdan Güncel Yaklaşım

4. BÖLÜM

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GİRİŞ

Nöronal dokularda özellikle glial hücre yüzeyinde anjiyotensin dönüştürücü enzim 2 (ACE2) reseptörleri eksprese edilmektedir. Virüs, insan hücresine girebilmek için ACE2 reseptörlerini kullanmaktadır. COVID-19 bu reseptörler aracılığı ile santral ve periferik sinir sistemini hedef almaktadır. Özellikle area postrema, vagusun dorsal motor çekirdeği, kardiyak/respiratuvar fonksiyonları düzenleyen merkezler, paraventriküler nükleus, traktus solitarii, rostro ventrolateral medulla ve nükleus ambiguus ACE2 reseptörlerinin daha yoğun bulunduğu nöronal alanlardır (1).

COVID-19 hastalığı prodromal nonspesifik semptomlar (halsizlik, yorgunluk, miyalji, artralji vb.) ile başlayıp sıklıkla belirgin respiratuvar semptomlar ile karşımıza çıkmaktadır. Ayrıca hastalık birçok nörolojik semptom (febril nöbetler, mental durum değişikliği, ensefalit vb.) ile de prezente olabilmektedir (2). Korona virüslerin nörotrofik ve nöroinvaziv özellikleri olduğu bilinmektedir. Nöronal etkilenme, virüsün direkt etkisine bağlı olduğu gibi sekonder immün sistem üzerindeki yaptığı değişikliklerden de kaynaklanmaktadır. Nazal epitele yerleşen virüsler santral sinir sistemine olfaktör sinir üzerinden ulaşabilmektedir. Bu durum santral sinir sisteminde inflamasyon ve demiyelinizasyonu tetiklemektedir (3). Hipozmi başta olmak üzere koku duyusu değişiklikleri nonkomplike COVID-19 hastalarında başlangıç belirtisi olarak görülebilmektedir. Hipozminin de nöronal etkilenmenin en erken bulgusu olabileceği düşünülmektedir. Bu durumun santral sinir sistemi tutulumu ile ilişkisi net değildir (4).

Santral sinir sistemi tutulumu direkt viral invazyon ve inflamasyona sekonder endotelial hasar ile olmaktadır. İmmün sistemde meydana gelen değişiklikler

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