

MİKROBİYOTA VE COVID-19

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GİRİŞ

Şiddetli akut solunum sendromu (SARS) Coronavirus 2'nin (SARS-CoV-2) neden olduğu Coronavirus hastalığı 2019 (COVID-19), başlangıçta Çin'de bir pnömoni salgını oluşturmuş ve ardından hızla tüm dünyaya yayılmıştır[1]. 30 Ocak 2020'de Dünya Sağlık Örgütü salgını uluslararası önemi haiz bir halk sağlığı acil durumu olarak ilan etmiştir. 20 Ocak 2021 itibarıyla, dünya çapında 94.124.612 doğrulanmış vaka, 2.034.527 ölüm bildirilmiştir[2].

Koronavirüsler genetik olarak Alfacoronavirus, Betacoronavirus, Gammacoronavirus ve Deltacoronavirus olmak üzere dört ana cinse ayrılır. Ve daha çok solunum ve bağırsak sistemini enfekte eder[3]. Son 20 yılda iki büyük solunum yolu enfeksiyonu salgınına neden olan SARS-CoV ve MERS-CoV, Betacoronavirus cinsine aittir[4,5]. Tam uzunlukta genom dizisi analizi yapıldığında SARS-CoV-2'nin SARS-CoV ile %79.5 ve yarasa

koronavirüsü ile %96 nükleotid sekans benzerliği olduğu gösterilmiştir[6]. Spike, zarf, membran ve nükleokapsid proteinleri SARS-CoV-2'de yapısal bir role sahiptir[7]. SARS-CoV, konakçı hücrelere girmek için anjiyotensin dönüştürücü enzim-2 (ACE-2) reseptörlerini kullanır[8]. Benzer şekilde SARS-CoV-2 de ACE-2 reseptörlerine bağlanır. Ancak MERS-CoV'un reseptörü dipeptidil peptidaz-4'e bağlanmaz[9,10]. SARS-CoV-2'nin kaynağı bilinmemektedir. Ancak yarasalar doğal rezervuar olarak kabul edilir çünkü bu virüs genetik olarak yarasa koronavirüslerine benzerdir[10].

SARS-CoV-2 klinik olarak 2002 - 2003'te Çin'de solunum yolu enfeksiyonu salgınları ve enfekte hastalarda (% 67.7 oranında) solunum semptomlarına neden olan SARS-CoV'ne benzerdir. Bu nedenle çalışmaların çoğu semptomlara ve göğüs radyografik bulgularına odaklanmıştır[11-13]. Ayrıca daha önce yapılan çalışmalar SARS-CoV-2 hastalarının ishal gibi sindirim semptomlarına

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- COVID-19 hastalarında görülen gastrointestinal sistem semptomları (özellikle ishal) hastaların mikrobiyotasından kaynaklanan değişiklikler ile ACE-2 ekspresyonunun azalması ile açıklanabilir.
- Beslenme ile mikrobiyotamızı desteklemek özellikle mevcut pandemideki durumumuz gibi terapötik veya koruyucu maddelerin bulunmadığı durumlarda hastalıkların ortaya çıkmasını önlemek adına en uygun, en etkili ve en ucuz tedavidir.
- COVID-19'u araştırırken etiyojisi ve klinik özellikleriyle birlikte mikrobiyotanın hastalık sürecindeki/prognozundaki potansiyel rolü göz ardı edilmemelidir.

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