

## COVID 19 VE MİKROBİYOLOJİK TANI YÖNTEMLERİ

Özlem AYDEMİR<sup>1</sup>

### GİRİŞ

Şiddetli Akut Solunum Sendromu Coronavirus 2'nin (SARS-CoV-2) neden olduğu Coronavirus hastalığı, ilk kez Aralık 2019'da Çin'de ortaya çıkıp, hızla yayılmış ve günümüzde 200'den fazla ülkeyi etkisi altına almıştır[1].

Gizemli bir şekilde ortaya çıkan ve hızla temaslılar arasında yayılan, ateş, öksürük, solunum sıkıntısı gibi semptomlarla başvuran hastalardan alınan bronkoalveoler lavaj örneklerinin sekanslanmasında, bu hastalığının etkeninin, yarası SARS (Şiddetli Akut Solunum Sendromu) virüs benzeri farklı bir beta-koronavirüs olduğu saptanmıştır. Daha sonra hücre kültüründe izole edilerek yapılan genetik analiz ile virüsün Orta Doğu Solunum Sendromu (MERS)-CoV ile %50, SARS-CoV ile yaklaşık %79 sekans homolojisi gösterdiği saptanmıştır. Böylece bu yeni tip coronavirus, son yüzyılda dünyada ciddi sağlık tehdidi oluşturan üçüncü zoonotik virüs olarak kayda geçmiştir[1-3].

Uluslararası Virüs Taksonomi Komitesi (ICTV), yeni coronavirusü, resmi olarak '*Şiddetli Akut Solunum Sendromu Coronavirus 2'* (SARS-CoV-2) olarak sınıflandırmış, Dünya Sağlık Örgütü (DSÖ)'de, virüsün neden olduğu hastalığın resmi adının Coronavirus Hastalığı 2019 (COVID-19) olduğunu açıklamıştır. DSÖ 30 Ocak 2020'de, COVID-19 salgınına, uluslararası halk sağlığına bir tehdit olarak resmen açıklamış ve ardından Mart 2020'de COVID-19 pandemisi olarak ilan etmiştir[3].

Coronavirus ailesi, helikal simetili pozitif polariteli, zarflı bir RNA virüs ailesidir. Memelilerde ve kuşlarda hastalıklara neden olan virüs insanlarda hafif soğuk algınlığından pnömoniye kadar değişebilen şiddette solunum yolu enfeksiyonlarına neden olurlar[1].

SARS-CoV-2'nin ortaya çıkmasından önce, araştırmacılar tarafından HCoV-229E, HCoV-HKU1, HCoV-NL63, HCoV-OC43, SARS CoV ve MERS dahil olmak üzere 6 tane insan corona virüsü (HCoV) keşfedilmiştir[2]. Ancak bugüne kadar

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tespit performansının düşmesine ve yanlış negatif sonuçlara yol açabilir. Serolojik araştırmalar, devam eden bir salgının araştırılmasına ve salgının saldırı oranı veya kapsamının geriye dönük olarak değerlendirilmesine yardımcı olabilir.

### Akılda kalması gerekenler

- COVID-19 tanısında altın standart PCR testidir.
- Numunenin alımı, taşıma koşulları, hastalığın süresi ve ağırlığı test sonuçlarını etkileyebilir.
- Negatif PCR sonucu COVID-19 tanısını dışlamaz,
- Antikor testleri, PCR negatif çıkan hastaları doğrulamak, plazma tedavisi için antikora sahip bireyleri tesbit etmek, temas izlemi, fiyasyon ve surveyansı kolaylaştırmak amaçlı kullanılır

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