BÖLÜM 8

NÖROLOJİ VE COVID-19

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GİRİŞ

Aralık 2019'dan beri yeni tip koronavirüsün neden olduğu ve "yenikorona virüs hastalığı (COVID-19)" olarak adlandırılan hastalık ilk Çin'de başlayıp tüm dünyaya hızla yayılmıştır [1]. Salgın ile birlikte tüm dünyada yaşamın akışı, yaşam tarzı, alışkanlıklar, eğitim, siyaset ve ekonomide sarsıcı değişiklikler meydana gelmiştir [2].

Hızla gelişen COVID-19 salgını, şiddetli akut solunum sendromu koronavirüs 2'den (SARS-CoV-2) kaynaklanmaktadır. COVID-19 hastalarının, daha şiddetli COVID-19 seyri gösterenlerde yüksek sıklıkta bilinç bozukluğu, inme ve nöbet gibi nörolojik belirtiler bildirilmiştir. Ancak bu belirtiler periferik sinir sistemi (PSS) veya santral sinir sisteminin (SSS) doğrudan enfeksiyonunu gerektirmez, sinir sistemi dışındaki bir viral enfeksiyona yanıt olarak şiddetli bir sistemik reaksiyona ikincil olarak da ortaya çıkabilir [3-4].

Hastalıkla ilgili yapılan ilk çalışmalarda anosmi, miyalji, baş ağrısı, bilinç bulanıklığı gibi nonspesifik nörolojik başlangıçlar bildirilmiştir. Ancak ilk nörolojik vakaların yayınlanmasından sonra nörolojik belirti ve bulguların raporlanması artış göstermiştir. [4-8].

SARS-CoV-2 spike (S) proteini, hücre tropizmi ile ilgili olan konak hücresel anjiotensin konverting enzim-2 (ACE-2) reseptörüne bağlanır. S proteininin transmembran proteaz serin 2 (TMPRSS2) tarafından işlenip ve hazır hale getirilmesi, virüs ve konak hücre zar füzyonunun SARS-CoV-2'nin hücreye girmesi için gerekli olduğu gösterilmiştir [9].

Koronavirüsler, ACE-2 reseptörlerine bağlanarak hücre içine girer ve beyne farklı yollardan ulaşabilir. Bunlardan ilki; kan beyin bariyerinde (KBB) ve beyin omurilik sıvısı (BOS) endotel ve epitel hücrelerini enfekte etmesi ya da lökositler aracılığıyla beyne ulaşmasıdır. İkincisi ise virüsün retrograd aksonal transport yoluyla beyne ulaşmasıdır; bu ulaşım genellikle kranial veya periferik sinirler aracılığı ile gerçekleşmektedir. Kas

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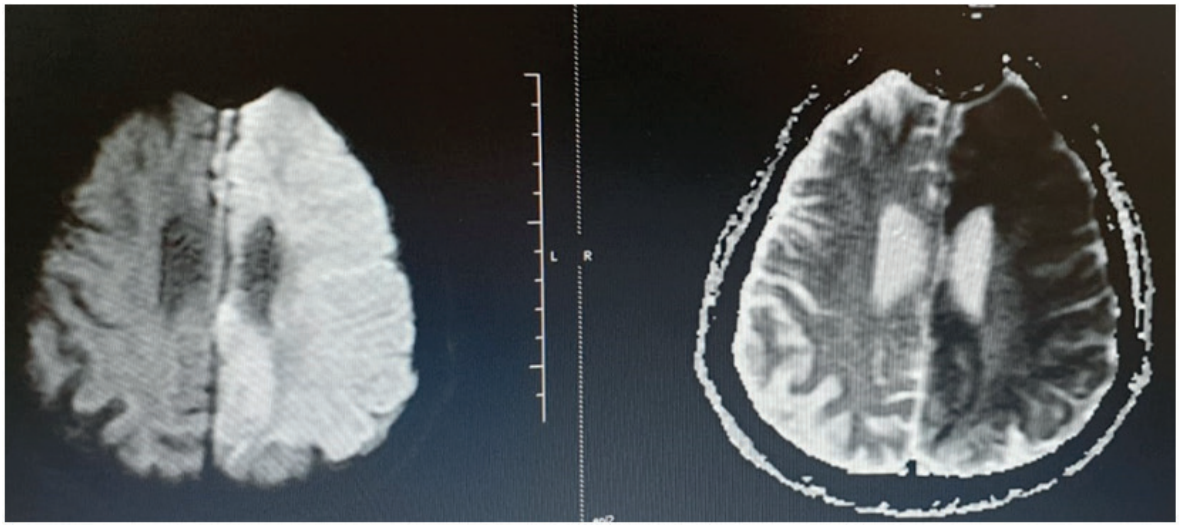

Figür 4: COVID-19 hastasında büyük damar tıkanıklığına bağlı, difüzyon ağırlıklı MR görüntülemede, supraganglionik aksiyel kesitte, sol orta serebral arter (MCA) ve sol anterior serebral arter (ACA) sulama alanlarının etkilendiği b-1000 hiperintens, ADC karşılığı hipointens akut enfarkt ile uyumlu difüzyon kısıtlılığı.

Sonuç

COVID-19 nörolojisi geniş bir otoimmun-trombotik bozukluk yelpazesine sahiptir. Bu olağanüstü zamanlarda, nörologların ön saflarda yer almaları ve COVID-19'un nörolojik komplikasyonlarına karşı tetikte olmaları gerekmektedir. Nörolojik bozuklukları olan hastalar, özellikle immünomodülatör tedaviler alan hastalar, yakından izlenmelidir.

Akılda kalması gerekenler

- Klinisyenler, nörolojik tutulum ve COVID-19'un olası nörolojik belirtileri için tetikte olmalıdır.
- Klinisyenler, özellikle yaşlı hastalarda, bilişsel bozukluğu ve/veya psikiyatrik komorbiditesi olan hastalarda COVID-19 sonrası olası nörolojik ve bilişsel yakınmaların farkında olmalıdır.
- Birçok nörolojik belirtinin, virüsün başlangıç semptomu olabileceği ve atipik-akut başlangıçta COVID-19 birlikteliği akılda tutulmalıdır.
- Nörolojik tutulum sırasında tedavi protokolünün gözden geçirilmesi ve etkileşim açısından dikkatli olunması gerekmektedir.

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