14. BÖLÜM

KALP YETERSİZLİĞİ VE DİYALİZ TEDAVİLERİ

Saliha YILDIRIM[1]
Ülver DERİCİ[2]

GİRİŞ

Kalp yetersizliği varlığında hem kalp yetersizliğinin hem de uygulanan tedavilerin etkisiyle böbrek fonksiyon bozukluğu sık gözlenmekte olup böbrek hastalığı bu hasta grubunda en sık görülen ikincil organ yetersizliğidir. Kalp ve böbrek arasındaki ilişki ilk olarak 1800'lü yılların başında tanımlanmış olup bundan bir yüzyıl sonra genel kabul görmüştür [1,2]. Akut dekompanse kalp yetersizlikli 100.000 hastanın kayıtlı olduğu *'ADHERE'* Amerikan kayıt sisteminde hastaların sadece %9'unun böbrek fonksiyonları normal olarak saptanmıştır [3]. Kronik kalp yetersizlikli hastaların %40 ile 60'ını bazal glomerüler filtrasyon hızı 60 ml/dakikanın altında olan hastalar oluşturmaktadır [4-10]. Akut kalp yetersizlikli hastalarda ise bu oran %50-70 olarak saptanmıştır [11-16]. Bazal böbrek fonksiyonları normal olan kompanse kalp yetersizliği hastalarında bile izlemde kronik böbrek hastalığı (KBH) ihtimalinin arttığı da yakın dönemde gösterilmiştir [17]. KBH'ın yanında böbrek fonksiyonlarında akut kötüleşme ve akut böbrek hasarı (ABH) da özellikle hastanede yatan kalp hastalarında sık görülmektedir. Bu durumlarda ABH, serum kreatinin değerlerinde 48 saat içinde 0,3 mg/dL veya daha fazla artış, ya da >%25 artış, son 7 günde serum kreatinin değerinin bazal değerin 1,5 katına veya daha fazlasına artış, idrar miktarının 6 saat boyunca 0,5 mL/kg/saatten az olması olarak tarif edilir [18-24]. Bu tablolar hastanede yatan kronik kalp hastalarında %15 civarında iken [5,25,26], akut kalp yetersizlikli hastalarda ise %10-50 arasında farklı oranlarda bildirilmiştir [16,25,27-34]. Akut böbrek bozukluklarının 1/3 ile 2/3'ü geri dönüşümlüdür [16,32,35-39]. Buna karşın hem KBH hem de ABH bu hasta popülasyonunda artmış mortalite ve tekrar hastaneye yatış sıklığında artış ile ilişkilidir [28,33].

Kalp yetersizliğinde genel olarak böbrek hasarına sebep olan birçok mekanizma olsa da sistolik/diyastolik disfonksiyon ve konjesyonun neden olduğu hemodinamik bozuklukların rolü yadsınamaz. Yakın zamanda yapılan çalışmalar kardiyak indeks ile glomerüler filtrasyon hızındaki azalma arasında bir ilişki saptayamazken, özellikle santral venöz basınç ve sağ atriyal basıncın glomerüler filtrasyon hızı için belirleyici olduğunu ortaya koymuştur [18,40-53]. Doppler ile saptanan renal parankimal venöz basınç artı-

[1] Uzm. Dr., Gazi Üniversitesi Tıp Fakültesi, Nefroloji BD, salihayildirim@gazi.edu.tr
[2] Prof. Dr., Gazi Üniversitesi Tıp Fakültesi Nefroloji BD, ulverderici@yahoo.com

Kalp yetersizliği ve Evre 3b ve daha ileri evre böbrek hasarı bulunan hastalarda ise hemodiyaliz veya periton diyalizi açısından değerlendirme yapılmalıdır. Hemodinamik instabilitesi bulunan hipotansif hastalarda periton diyalizi hemodinami üzerindeki minimal etkisi nedeniyle daha iyi bir seçim olarak öne çıkmaktadır. Ama periton diyalizinin hemodiyalize tek üstünlüğü bu değildir. Rezidüel böbrek fonksiyonlarını koruma ve diüretik direncini kırmada da katkıları bulunduğu göz önünde bulundurulmalıdır. Özellikle kronik kalp yetersizliğine bağlı evre 3b veya daha ileri derecede kronik böbrek hastalığı olup; yeterli sosyal desteği olan, cerrahi şansı olmayan, tıbbi tedaviye yanıtsız olan veya tedaviyi tolere edemeyen refrakter kalp yetersizlikli hastalarda hasta uyumu da sağlanırsa günde 1 ile 3 değişimden oluşan veya haftada 3 gün 12'şer saatlik değişimlerden oluşan rejimlerle periton diyalizi tercih edilebilir. Tercih edilen solüsyon öncelikle uygunsa ikodekstrin olmalı, günde bir-iki değişim ile başlanmalı ve hasta ihtiyacı ve periton durumuna göre değişimler düzenlenmelidir.

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