

BÖLÜM 26

YOĞUN BAKIMDA AKUT BÖBREK HASARI

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GİRİŞ

Akut böbrek hasarı (AKI), Yoğun Bakım Ünitesinde (YBÜ) izlenen kritik hastalarda morbidite ve mortaliteye neden olan, genellikle göz ardı edilen bir hastalık sürecidir(1, 2). AKI yüksek kaynak ve finansal yüke yol açmaktadır (1). Akut böbrek hasarı (AKI) böbrek fonksiyonlarında ani bir bozulma ile ortaya çıkan, evre ve nedene göre sınıflandırılmış, serum kreatinin ve üre nitrojeni konsantrasyonunda artma, glomerüler filtrasyon hızında (GFR) ani bir düşüş ve/veya oligüri gelişimi ile kendini gösteren heterojen bir hastalık grubudur (2-4). AKI, mortalite üzerine bağımsız etkisi olan yaygın ve yıkıcı bir problemdir (5). Yoğun bakım ünitesine (YBÜ) kabul edilen hastalar için AKI insidansı % 22-67 arasında değişmektedir (6-8). Bu hastaların % 4.1-13.5'de renal replasman tedavisine (RRT) ihtiyaç duyulur (6, 7, 9, 10). YBÜ'de şiddetli AKI nedeniyle RRT uygulanan hastaların kısa dönemde mortalite oranları %50'nin üzerindedir(11). AKI nedeniyle RRT'si uygulanan ve AKI atağından sonra taburcu edilen hastalar, AKI gelişmeyen bireylere kıyasla daha uzun süreli diyaliz bağımlılığı ve mortalite riski altındadır (12, 13).

AKI KILAVUZU

Akut Böbrek hasarının tanısında ve izleminde kreatinin, üre, GFR, idrar çıkışı kullanılmaktadır. Ancak her birinin kısıtlayıcı yanları vardır. Her ne kadar kreatinin düzeyi ve idrar çıkışı böbrek fonksiyonunu değerlendirmek için en uygun yol olsa da, klinik uygulamada bazı sınırlamaların dikkate alınması gerekir. Sepsis, karaciğer yetmezliği veya sarkopeni hastaları kreatinin üretimini azaltarak, GFR'nin yanlış yüksek ölçülmesine neden olabilir (14-16). Aksine büyük yanıklar, rabdomiyoliz veya majör travma ile ilişkili protein katabolizmasındaki büyük artışlar, kreatinin üretiminde artış yaparak GFR'nin yanlış düşük hesaplanmasına yol açabilir(3, 14, 16). Kreatinin tüm sıvı bölmelerine eşit olarak dağılır. Bu yüzden kreatinin konsantrasyonu, toplam vücut suyuna göre değişir. Bu nedenle, akut aşırı volüm yüklenmesinde böbrek fonksiyonunun belirleyicisi olarak kreatinin kullanılması, yeni kararlı duruma ulaşılan kadar AKI'nın tanınmasında gecikmelere yol açabilir (1, 17).

İdrar çıkışı tek başına AKI için kötü bir belirleyicidir. Bazı hastalar daha önceden AKI gelişmiş olmasına rağmen anüri noktasına gelinceye

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SRRT ile karşılaştırılabilir hemodinamik stabilite sağlar. SLED'in diğer pratik avantajları arasında antikoagülasyon olmadan tedavinin verilmesi ve klinik prosedürlerle kesintileri en aza indirmek için gece saatlerinde uygulama yer alır (94-96).

Diyaliz Modalitelerinin Klinik Üzerine Etkisi

SRRT'ye atfedilen teorik faydalara rağmen, randomize çalışmalar İHD ile karşılaştırıldığında sağkalımda artış sağlanmadığını göstermiştir (97, 98). SRRT uygulanan hastalarda İHD uygulanan hastalara göre daha düşük bir diyaliz bağımlılığı riski olduğu gösterilmiştir (99, 100). Küçük klinik çalışmalar, SRRT'de artan volüm veya İHD'de artmış seans sıklığı olarak tanımlanan RRT yoğunluğu veya dozunun artmasının, sağkalımın artmasına yol açabileceğini öne sürmüştür (101-103). Ancak diğer çalışmalarda diyaliz dozunun artırılmasının spesifik bir avantajı gözlenmemiştir. Yüksek yoğunluklu RRT'nin sağladığı zararlı solütlerin (antiinflamatuvar sitokinler ve antibiyotikler) gelişmiş kontrolünün, endojen olan esansiyel besinler gibi faydalı solütlerin uzaklaştırılmasıyla dengelenmiş olup olmadığı net değildir (80).

Antikoagülasyon

Ekstrakorporeal devrenin antikoagülasyonu, yapay bir membran ile temas ettiğinde kanın pıhtılaşma eğilimine karşı koymak için yaygın olarak reçete edilir. RRT için bir antikoagülan seçiminde göz önünde bulundurulması gereken faktörler arasında hastanın kanama ve tromboz eğilimi ve seçilen RRT yöntemi bulunur. Alternatif endikasyonlar (örneğin, mekanik kalp kapakçıkları, derin ven trombozu) için antikoagülasyon gerektiren hastalarda, sistemik olarak infüze edilmiş fraksiyone olmayan heparin, RRT devresinin yeterli antikoagülasyonunu sağlar. Heparine bağlı trombositopenisi olan hastalarda sistemik argatroban infüzyonu uygun bir alternatiftir (101). Sistemik antikoagülasyonun kontrendike

olduğu veya istenmediği durumlarda, bölgesel sitrat antikoagülasyonu (RCA) etkili ve güvenli bir antikoagülasyon stratejisi olarak ortaya çıkmıştır (79, 102).

SONUÇ

AKI kritik hastalarda sıklığı giderek artan, tedavisi karmaşık ve maliyeti yüksek olan bir hastalıktır. AKI hastaların mortalite ve morbidite oranlarında artışla direkt ilişkilidir. Bu nedenle kritik hastalar YBÜ'ne kabul edildikten hemen sonra AKI gelişimine yol açacak riskler belirlenmelidir. Önlem ve erken tedavi için yüksek riskli hastalar klinik ve laboratuvar olarak yakından izlenmelidir.

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