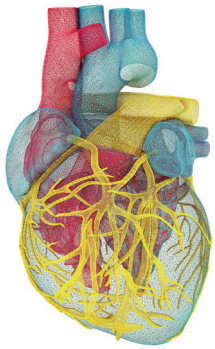

BÖLÜM **54**

Kardiyak Kritik Hastada Glukoz Homeostazı ve Diyabet

Ayşe Müge KARCIOĞLU [1]

KRİTİK HASTALIK TANIMI VE EPİDEMİYOLOJİSİ

Kritik hastalık, hayati fonksiyonları idame ettirebilmek için farmakolojik ve/veya mekanik destek gerektiren hayatı tehdit edici durumlar için kullanılan bir terimdir (1). Genellikle sistemik inflamatuar yanıt, bozulmuş immün sistem ve organ hasarlarındaki iyileşmede bozukluklara bağlı olarak gelişmektedir. Kardiyovasküler hastalıklar, kritik hastalığın en önemli nedenlerinden biridir ve Dünya Sağlık Örgütü'nün 2019 verilerine göre ölümlerin %32'sine neden olmaktadır (2). Akut koroner sendromlar ve komplikasyonları, dekompanse kalp yetersizliği ve aritmiler yoğun bakıma yatışın en sık nedenlerini oluşturmaktadır (3).

KRİTİK HASTADA GLUKOZ HOMEOSTAZI

Diyabet; hiperozmolar koma, diyabetik ketoasidoz, laktik asidoz ve hipoglisemi gibi ciddi komplikasyonları nedeniyle kritik hastalığın başlıca bir nedeni olmasının yanı sıra, diğer komorbid durumlara bağlı kritik hastalık gelişmesine de katkıda bulunabilmektedir. Kritik hastalarda kan şekeri regülasyonunda bozulma sadece diyabet tanısı olan hastalarla sınırlı olmamakla birlikte; verilen medikal tedavilere, eşlik eden enfeksiyonlara ve vücutta gelişen stres yanıtı nedeniyle bozulan glukoz metabolizmasına bağlı olarak tüm hastalarda gelişebilmektedir. Bu nedenle, Amerika Diyabet Cemiyeti (American Diabetes Association-ADA), hastaları bilinen diyabeti olanlar, yeni tanı diyabetler ve hastane kaynaklı diyabet gelişenler olarak 3 gruba ayırmıştır (4). Kritik hastalıkta hiperglisemi, hipoglisemi ve kan şekerindeki değişkenliği ifade eden glisemik variyabilitedeki bozulmalar artmış mortalite ve morbidite ile ilişkilidir (5, 6). Bu bölümde her bir durum ayrı başlık altında anlatılacaktır.

Hiperglisemi

Kritik hastalıkta hiperglisemi, eşlik eden diyabet varlığından bağımsız olarak kötü klinik sonuçlarla ilişkilidir (7, 8). Hipergliseminin kardiyak kritik hastada uzun yatış sürelerine, komplikasyon ve yeniden yatış riskinde ve mortalitede artışa

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sından fark olmadığı bildirilmiştir (63). Almanya'da yapılan tek merkezli bir çalışmada ise 2010 ve 2020 yılları arasında EKMO uygulanmış 392 hastanın EKMO'ya başlandığı andaki kan şekeri düzeyleri incelenmiş, hipoglisemik (<80mg/dL) ve ağır hiperglisemik (>400mg/dL) olan hastaların klinik sonuçlarının 80-400 mg/dL aralığında olanlara göre daha kötü olduğu bildirilmiştir (64). Koronavirüs (COVID-19) enfeksiyonu nedeniyle yoğun bakımda EKMO uygulanan hastalarda da hipoglisemik (<70 mg/dL) ve hiperglisemik (>200 mg/dL) değerlerin kötü prognozla ilişkili olduğu belirtilmiştir (65). EKMO uygulanan hastalarda glisemik hedeflere yönelik prospektif, randomize kontrollü çalışmalara ihtiyaç olmakla birlikte, mevcut literatür verileri çok düşük ve çok yüksek kan şekeri düzeylerinden kaçınılması gerektiğini göstermektedir. Bu açıdan kritik hastalıkta hedeflenen 140-180 mg/dL aralığı EKMO uygulanan hastalarına uygulanabilir görünmektedir.

Öneriler

Tüm kardiyak kritik hastalar, diyabet açısından taranmalı ve yoğun bakım takibi sırasında aralıklı kan şekeri takibi yapılmalıdır. Hiperglisemik seyreden hastanın tedavi şemasına; hastanın komorbiditelerine, akut hastalığına göre karar verilmeli ve tedavi bireyselleştirilmelidir. Kan şekeri>180 mg/dl olan yoğun bakım hastalarına insülin tedavisi başlanmalıdır ve kan şekeri 140-180 mg/dl aralığında tutulmalıdır. Kan şekeri regülasyonu sağlanırken hipoglisemiden kaçınılmalıdır. Yoğun bakım taburculuğu sonrası da 8-12 hafta içinde hastalar tekrar diyabet açısından değerlendirilmelidir.

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