

# 3. BÖLÜM

## HİPERTANSİYON HASTASINDA PROGNOSTİK BİYOKİMYASAL BELİRTEÇLER

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### GİRİŞ

Biyolojik belirteç; biyolojik veya patojenik süreçlerin veya terapötik bir işlemin göstergesi olarak ölçülen ve değerlendirilen bir özellik olarak tanımlanmıştır (1). Biyobelirteçler, biyokimyasal, fizyolojik, anatomik, histolojik ve fiziksel olabilir. Belirteçler; bir hastalığı olan kişilerin belirlenmesi (tanısal), başka bir hastalık veya olumsuz sonuç için risklerin belirlenmesi (prognostik) ve doz-yanıt ilişkilerinin belirlenmesi gibi önemli amaçlarla kullanılırlar (2).

Hipertansiyonu (HT) olan hastalarda genellikle diyabetes mellitus (DM), dislipidemi, sol ventrikül hipertrofisi (LVH), kronik böbrek hastalığı (KBH) ve son dönem organ hasarı gibi (3) komorbid durumlar bulunur. Biyobelirteçler, kardiyovasküler (KV) olay gelişme riskinin belirlenmesi ve tedavi yanıtının izlenmesi amacıyla, serebrovasküler hastalık (SVH), sol ventrikül diastolik disfonksiyonu (LVDD) ve ejeksiyon fraksiyonu korunmuş kalp yetmezliğinin (KY) erken tanı ve prognozu için sıklıkla kullanılır. Kontrolsüz HT'un sekellerinin hafifletilmesi veya önlenmesinde prognostik değer sağlayan bu biyobelirteçlerin belirlenmesi zorunludur ve bu konuya ilişkin veriler azdır (4-6).

Bu bölümde HT hastalarında KV olay geliştirme risk skoru belirlemede ve prognozu öngörmede kullanılan bazı belirteçlerden bahsedilecektir.

### TAM KAN SAYIMI

Hemoglobin ve hematokrit HT hastalarında yararlı bilgiler sağlayabilir. Hemoglobinde anormal bir artış genellikle kronik hipoksiye sekonder gelişen polistemiye düşündürür (7). Polistemi, hipokalemi ve böbrek fonksiyonunda bir düşüşle birlikte görüldüğünde, renovasküler HT'ü düşündürebilir (8). Kronik böbrek hastalığı sırasında anemi için uygulanan fazla eritropoietin de polistemiye neden olabilir.

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konsantrasyonlarına neden olabilir (114). Ayrıca yüksek homosistein konsantrasyonları ile çeşitli vasküler ve KV bozukluklar arasında bir ilişki olduğu ileri sürülmüştür (115,116).

Hiperhomosisteineminin endotel hücre hasarına katkıda bulunduğu, damarların sertliğini artırdığı ve nihayetinde hemostazın normal kan akışı sürecini olumsuz etkilediği gösterilmiştir (117).

Hiperhomosisteineminin KV mortalite ile ilişkisini gösteren bulgulara rağmen, HT ile ilişkisi halen tartışılmaktadır ve mevcut ESC/ESH kılavuzlarında ölçümü tavsiye edilmemiştir (7).

## SONUÇ

HT tanısı alan her hastadan rutin olarak tam kan sayımı, açlık kan glukozu, HbA1c, lipit profili, sodyum, potasyum, ürik asit, kreatinin, glomerüler filtrasyon hızı, karaciğer fonksiyon testleri ve idrar analizi (mikroalbümin için dipstik testi veya albümin/kreatinin oranı) istenmesi 2018 yılında yayınlanan ESC/ESH kılavuzu tarafından önerilmektedir (14). Bunlara ek olarak hsCRP, hs-cTn, NP'ler de HT hastalarında prognoz açısından faydalı bilgiler vermektedir. Endotel fonksiyon testleri şu an araştırma laboratuvarlarında ölçülmekte olup çalışmalar devam etmektedir. Homosistein yüksekliğinin KV olaylarla ilişkisi gösterilmiş olmasına rağmen prognostik faktör olarak kullanılmamaktadır. Henüz araştırma aşamasında olan birçok biyobelirteç vardır. Bu belirteçlerin HT hastalarında prognoz ve risk değerlendirmesinde rutin olarak kullanılması için yeni çalışmalara ihtiyaç duyulmaktadır.

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