# BÖLÜM 9

# Atrial Fibrilasyonda Biyokimyasal Belirteçler

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## GİRİŞ

Biyobelirteçler, kardiyolojinin günlük pratiğinde vazgeçilmez tanı araçları haline gelmiştir (1). Özellikle miyokard enfarktüsü (MI) ve kalp yetmezliği (KY) tanı ve tedavisinde büyük etkinliğe sahiptir (2).

Atriyal fibrilasyon (AF) en yaygın klinik aritmidir ve prevalansının önümüzdeki on yıllarda belirgin şekilde artması beklenmektedir (3). AF'nin altında yatan mekanizmalar tam olarak anlaşılamamış olsa da patogenezinin aydınlatılmasında önemli ilerlemeler kaydedilmiştir. Her bireyde AF'ye yol açan ortam, genellikle inflamasyon, oksidatif stres, kardiyomiyosit hasarı, atriyal fibroz ve trombogenez gibi patofizyolojik mekanizmaları indükleyen risk faktörleri tarafından yönlendirilir. Bu risk faktörlerinin etkileri, yaşlanmanın arka plan etkisi ve altta yatan genetik yatkınlık tarafından modüle edilir. Bu mekanizmalarda yer alan çeşitli moleküller, AF oluşumu, ilerlemesi ve tromboembolizm ve ölüm dahil komplikasyon riskini gösterme potansiyeline sahiptir. Tablo 1'de AF ve AF'li hastalardaki advers klinik olaylarla ilişkisi olan, klinik uygulamalarda faydalı olabilecek temel biyobelirteçler özetlenmiştir (4).

AF'si olan hastalarda diğer bireylere göre artmış inme ve tromboembolik olay riski vardır. Bu riskler etkili antikoagülan tedavi ile önemli ölçüde azaltılmaktadır. Ancak AF'si olan tüm hastalara antikoagülan tedavi verilmez çünkü tedavi sonucu kanama riskinde artışa neden olabilir. Burada hastaların etkili kanama/inme riskinin ve hangi hastalara antikoagülan tedavi verileceğinin belirlenmesi büyük önem taşımaktadır ve AF yönetiminde kritik bir adımdır (5). Farklı inme ve kanama risklerine sahip hastaların belirlenmesini ve oral antikoagülan tedaviye karar vermeden önce risk-fayda dengesinin değerlendirilmesini sağlayan çeşitli risk sınıflandırma modelleri geliştirilmiştir (6).

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anlamına gelebilir (90). AF'deki miyokardiyal fibrozun, kardiyoversiyondan sonra AF'nin tekrarlaması ile ilişkili olduğu gösterilmiştir (96). Bu nedenle, AF için bir tarama aracı olarak ST2 kullanımı AF'si ve yüksek ST2'si olan hastalarda erken kateter ablasyonu gibi daha agresif tedaviye izin verebilir. Bazı algoritmalarda ST2 önerilmiştir ancak böyle bir algoritmayı doğrulamak için daha fazla araştırmanın gerekli olduğunu vurgulamak önemlidir (2).

## SONUÇ

AF'de biyobelirteçlerin klinik uygulamaları, biriken verilerle ortaya çıkmaktadır. Troponin ve NT-proBNP üzerinde en çok çalışılan biyobelirteçlerdir. GDF-15, D-dimer, CRP, IL-6 gibi birçok biyobelirteç bazı çalışmalarda klinik risk faktörlerine ek olarak AF'de majör kanama ile bağımsız ilişkiler göstermiştir (31,75,79,97–99). Ancak D-dimer, CRP ve IL-6 konsantrasyonları bireysel ve bireylerarası büyük ve hızlı değişkenlik gösterir. Ek olarak, D-dimer konsantrasyonu, oral antikoagülasyon tedavisi ile azalır, bu da aynı anda kanama riskini artırır ve D-dimer konsantrasyonlarının kanama riski ile ilişkili olarak yorumlanmasını zorlaştırır. Ayrıca, duyarlılık analizlerinde ne D-dimer ne CRP ne de IL-6 risk değerlendirmesine katkıda bulunmamıştır (10).

En yeni AF kılavuzlarının (9) AF'de biyobelirteçlerin kullanımına ilişkin öneriler sunması cesaret vericidir, bu önerileri sınıf I'e yükseltmek, mevcut biyobelirteçlerin gelecekteki uygulamalarını bulmak, rutin hasta bakımına klinik olarak faydalı ve uygun maliyetli bir şekilde uygulanabilecek ideal biyobelirteçler ve klinik risk faktörleri kombinasyonunu tanımlamak için daha fazla çalışma gereklidir (2,4).

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