

BÖLÜM 4

LİPOPROTEİNLER, ATEROSKLEROZ VE ATEROJENİK LİPİD PROFİLİ

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GİRİŞ

Ateroskleroz, topluca kardiyovasküler hastalık (CVD) olarak adlandırılan iskemik kalp hastalığına, felçlere ve periferik vasküler hastalığa neden olan, büyük ve orta çaplı arterlerin kronik inflamatuvar bir hastalığıdır. Vasküler lipid birikimi, arteriyel lümenin daralması, oluşan plakta genişleme, plakta kararsızlık ve rüptür sonucu obstrüksiyon ve iskemi bulgularının ortaya çıkması, önemli morbidite ve mortalite sebebi olan aterosklerotik kardiyovasküler patolojilerin temel patobiyolojik mekanizmalarını özetler (1). Aterosklerozun merkezinde trigliseritler, fosfolipidler ve kolesterol gibi lipid metabolizması ürünlerini içeren lipoproteinler ve bunların makrofajı aktivasyonu sonucu köpük hücre oluşumu gibi patolojik değişikliklere yol açan biri dizi olay vardır. (2) Lipoproteinler, lipid içerikleri, metabolik yollardaki aktiviteleri, birikim ve oksidasyon potansiyelleri ile farklı aterojenik riskler oluştururlar (1, 3). Kitabımızın bu bölümünde aterosklerotik kardiyovasküler hastalığın patogenezinde rol oynayan immünolojik, inflamatuvar ve trombotik süreçlerdeki temel tetikleyiciler ve çeşitli lipoproteinlerin ateroskleroz patofizyolojisinde oynadıkları roller gözden geçirilecektir.

LİPOPROTEİNLER VE APOLİPOPROTEİNLER

Lipoproteinler; kolesterol, fosfolipid ve apolipoproteinlerle çevrili kolesterol esterleri ve trigliserit çekirdeği içeren kompleks birer plazma parçacıklarıdır. Li-

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azaltıklar için uluslararası kabul görmüş rehberlerde dislipidemi ve LDL-kolesterolle yönelik en önemli seçeneklerdir (33, 34). Literatürde LDL-C'nin düşürülmesinin PAH'daki ekstremitte olaylarını da azaltabileceğini gösteren kanıtlar artmaktadır. Bununla birlikte, standart lipid panelleri, lipoprotein partiküllerinin konsantrasyonunu veya boyutunu ölçemez ve bunun yerine her partikül sınıfı içindeki toplam kolesterol konsantrasyonunu ölçebilir. Lipoprotein partikül boyutu ve sayısı ile bu partiküllerin kolesterol içeriği bireyler arasında önemli ölçüde değişebilir (35). Bu, tipik olarak standart lipid panellerine dahil edilmeyen ve bu nedenle PAH'daki epidemiyolojik çalışmalardan sıklıkla dışlanan VLDL gibi trigliseritten zengin lipoproteinler için özellikle önemlidir.

SONUÇ

Son birkaç dekaddır, küresel bir salgın haline gelen, KVH riskine katkıda bulunan, artan aterosklerotik hastalık yüküne tanık oluyoruz. Aterosklerozun hücresel ve moleküler biyoloji mekanizmalarının incelenmesi, aterom gelişimine yol açan süreçler ve bu hastalığın klinik belirtileri hakkında dikkate değer bilgiler sağlamıştır. Terapötik bir hedef olarak yalnızca LDL-C'ye odaklanmak, bu hastalarda uzuv olayları riskinin tam olarak ele alınmasına engel olabilir.

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