



BÖLÜM 23

KORONER REVASKÜLARİZASYONDA CERRAHİ ENDİKASYONLAR

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Koroner arter hastalığına (KAH) bağlı ölüm oranları medikal tedavinin yaygınlaşması ve revaskülarizasyon tekniklerinin gelişmesi sayesinde giderek azalmış olmasına rağmen gelişmiş ülkelerde halen mortalitenin en sık sebebi olmaya devam etmektedir (1). Sones ve Shire 1960 yıllarda Cleveland Kliniğinde yaptıkları selektif koroner anjiyografi çalışmalarıyla koroner arter daraltıcı ve tikayıcı lezyonları tanımlamayı başarmışlardır (2). Favalora ve Effler 1967 yılında aynı merkezde safen venini greft olarak ilk kez kullanmışlardır. 1971 yılına kadar toplam 741 vakaya ulaşmışlar ve benzer yıllarda DeBakey Houston'da LAD'ye (Sol ön inen arter) safen veni anastomozunu gerçekleştirmiştir (3, 4). Bu gelişmeler sonrasında giderek yaygınlaşmaya başlayan Koroner Arter Bypass Greft Cerrahisi (KABC) özellikle çoklu damar hastalarının revaskülarizasyon tedavisinde altın standart haline gelmiştir (4, 5).

Koroner Arter Bypass Greft Cerrahisinin ana hedefleri iskeminin düzeltilmesi, anjinal sempatomların azaltılması, tekrarlayıcı miyokard infarktüslerini engellemek, yaşam süresinin uza-

tilması, sol ventrikül fonksiyonları korumak ve kişilerin egzersiz kapasitesinin artırılmasıdır (6). Perkütan revaskülarizasyon teknikleri ile koroner arter bypass greft cerrahisini kıyaslayan, uzun yıllar boyunca yapılmış büyük çaplı çalışmaların sonuçları belirgin olarak 2010 yılında Avrupa Kardiyoloji Derneği (European Society of Cardiology ESC) ve 2011 yılında Amerikan Kalp Cemiyeti (American Heart Association, AHA) kılavuzlarına yansımıştır. Kılavuzların en temel önerisi revaskülarizasyon tekniği kararının kardiyologlar ve cerrahlar tarafından oluşturulan “kalp ekibi” tarafından verilmesidir. Ekibin karar vermesi esnasında STS (Society of Thoracic Surgeons) ve SYNTAX (SYNergy between PCI with TAXUS and Cardiac Surgery) skorlarının dikkate alınması önerilmiştir (7-10).

SYNTAX skoru, SYNTAX (SYNergy between PCI with TAXUS and Cardiac Surgery) çalışması için hazırlanmış ve koroner anjiyografi sonuçlarına göre lezyonun ciddiyeti, sayısı, yeri ve kompleksliği gibi faktörlerinin değerlendirilmesine dayalı bir skorlama sistemidir (11, 12). SYNTAX skoru bilgisayar programı aracılığı ile 12 adet temel sorunun ardışık olarak cevaplanması sonucu hesaplanır (13). Hesaplama esnasında her lezyon

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leyicisi olduğu saptanmıştır (42). Ayrıca hemodialize girmeyen hastalarda GFR (Glomerüler filtrasyon hızı) değerleri postoperatif mortalite, morbidite ve akut böbrek yetmezliği ön gördürücüsüdür (43). GFR değeri azaldıkça perioperatif ölüm, inme riski ve mekanik ventilasyon desteği ihtiyacı artar. $GFR < 30 \text{ mL/dk}/1.73\text{m}^2$ olan hastalarda normal hasta popülasyonuna oran ile postoperatif dönemde akut böbrek yetmezliği riski 20 kat daha yüksektir (43-45).

Son dönem olmayan kronik böbrek yetmezlikli 4584 hastanın dahil edildiği retrospektif bir çalışmada KABC'nin PKG'ye oranla daha uzun yaşam süresi sağladığı görülmüştür. Bu farklılık ise $GFR > 60 \text{ ml/dk}$ üzerinde iken ortadan kalmaktadır (46). ARTS II çalışmasının sonuçlarına göre PKG tedavisi alan KBH hastalarında KABC tedavisine kıyasla tekrarlayan revaskülarizasyon ihtiyacıının yüksek olduğu gözlemlenmiştir (47, 48). Özellikle $GFR < 60 \text{ ml/dk}$ olan KBH hastalarında PKG yapılan grupta KABC yapılan hasta gruplarına kıyasla 5 yıllık takipleri sonrası 3 kat daha fazla revaskülarizasyon ihtiyacı ortaya çıkmıştır (47, 49).

Son dönem böbrek hastalarında (SDBH) yapılan çok sayıda küçük çaplı retrospektif çalışmalar sonucunda da KABC ile revaskülarizasyon sağlanması yaşam süresini olumlu etkilediği vurgulanmıştır (50, 51). USRDS (United States Renal Data System) verileri kullanılarak yapılan retrospektif bir çalışmada PKG uygulanan 6887 SDBH ile KABC uygulanan 7419 SDBH karşılaştırılmıştır. Perioperatif mortalite oranları KABC kolunda yüksek olmasına karşın (sırasıyla mortalite oranları %12,5 %5,4) uzun dönem sağ kalım oranları PKG yapılan hasta grubuna kıyasla daha yüksek saptanmıştır (52). Yapılan çalışmaların çoğunun retrospektif olması ve uygulanan PKG tekniklerinin günümüzde büyük oranda değişmesi nedeniyle, bu verilerin günümüz şartlarında rehberliği sınırlı kalmaktadır. Bu nedenle bu özel hasta gruplarında halen prospektif geniş çaplı uzun dönem çalışmalara ihtiyaç duyulmaktadır.

Sonuç olarak günümüzde yeni nesil ilaç kaplı stentler ve kompleks lezyonların revaskülarizasyonu için perkütan koroner girişim teknikleri geliştirilmesine rağmen koroner arter bypass greft cerrahisi halen önemi korumaktadır. Özellikle diyabetes mellitus, kronik böbrek hastalığı, sol ventrikül disfonksiyonu ve/veya yaygın damar hastalığı olanlarda komplet revaskülarizasyon yönüyle KABC'nin PKG'ye olan üstünlüğü tartışılmazdır.

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