Bölüm
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KORONER ATEREKTOMİ VE EMBOLİ ÖNLEME

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Kardiyovasküler hastalıklar dünyada, ölüm nedenleri arasında uzun yıllardır ilk sıralarda yer almakta (1).Ciddi koroner arter hastalığının bir göstergesi, koroner arter kalsifikasyonunun varlığı ve kalsifikasyonun derecesidir, ateroskleroz derecesi ileride meydana gelebilecek kardiyak olayların oranı ile güçlü bir şekilde ilişkilidir. Ağır kalsifiye lezyonlarda perkütan koroner girişim kalsifiye olmayan lezyonlara kıyasla düşük başarı oranları, daha yüksek komplikasyon oranları ve uzun vadede daha kötü sonuçlar ile ilişkilidir.(2) Belirli hasta gruplarında kesin sonuca ulaşabilmek için stent implantasyonuna alternatif tekniklerin de kullanımı ihtiyacı doğmaktadır .

Bu teknikler koroner arterdeki plağı ortadan kaldırma amacı ile yapılan aterektomi veya trombüsün çıkarılması amacı ile yapılan trombektomi, hastalıklı yerin ilerisine embolik artıkların geçişini engellemeye yönelik emboli koruma gibi tekniklerdir .

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Koroner aterektomi, plağın parçalanıp dağılması yerine ortadan kaldırılması ve bu sayede daha geniş damar çapı elde edilmesi amacı ile kullanıma girmiştir. Tekniğin geliştirildiği 1987 yıllarında, balon anjioplasti öncesi sonuçların iyileştirilmesi amacı ile kullanılsada yüksek restenoz oranları nedeni ile daha sonra seçilmiş kalsifik ve zor lezyonlarda stent işlemini kolaylaştırmak amacı ile kullanıldı .

Günümüzde koroner lezyonlar için kullanımı azalmış olsada periferik arter lezyonlarında halen kullanılmaktadır.

Rotasyonel Aterektomi

Rotasyonel aterektomi tekniğinde kullanılan Rotablator (şekil 1) (SCIMED, Boston Scientific Corporation, Boston, MA) küçük ve dakikada yaklaşık 140.000 tur hızla dönen teflon kılıfla çevrili testere şeklinde başlık ile damar duvarına zarar vermeden kalsifiye plağı 10-15 µm boyutunda mikrosirkulasyondan retiküloendotelyal sisteme geçecek boyutlara kadar parçalar. (3,4) . Özellikle kalsifik ve osteal lezyonlarda ,stent yerleştirilmesi planlanan hastalarda önce rotasyonel aterektomi yapılması, stentin daha uygun biçimde yerleştirilmesini ve daha iyi sonuçlar elde edilmesini sağlamaktadır. (5) Rotablator sistemi ile kıvrımlı koronerlere bile ulaşılabilmekte ve gerektiğinde değişik büyüklükte testere başlıkları kullanılabilmektedir. Rotasyonel aterektominin başlıca kısıtlılıkları; komplikasyon oranı ve maliyetlerin yüksek olması , büyük ölçüde operatörün deneyimine bağımlı olması olarak sıralanabilir.

Endikasyonlar

Kalsifik lezyonlar bazen en küçük balonlarla geçilemeyebilir yada geçilse bile lezyon istenen genişlikte dilate edilemez ,bu durumda yüksek basınçla lezyonların dilate edilmesi sonucu duvar hasarı , diseksiyon veya perforasyon gelişme

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şekilde uzaklaştırılmasına izin verir.EMERALD (Enhanced Myocardial Efficacy and Recovery by Aspiration of Liberated Debris) çalışmasıyla primer PCI'da ek embolik korumanın en büyük randomize çalışmasıdır.Hastalar GuardWire sistemiyle veya standart PCI ile birlikte distal korumayla randomize edildi.ST-segment çözünürlüğü ve infarkt boyutlarında gruplar arasında fark bulunamadı(50).GuardWire sistemini inceleyen bir başka çalışmada ASPARAGUS(ASPirAtion of libeRated debris in Acute myocardial infarction with GuardWire plUS)çalışmasıyla gruplar arasında infark boyutunda fark yoktu ve tedavi grubu ile daha az distal embolizasyon olduğu görüldü(51).

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