

GİRİŞ

Kalp dışı cerrahi girişimler, kardiyovasküler hastalığı olan veya kardiyovasküler hastalığı için risk faktörlerine sahip hastalarda, morbidite ve mortalite açısından önemli bir risk oluşturmaktadır. Hastanın cerrahi öncesi genel durumu, eşlik eden kronik hastalıkları ve cerrahi işlemin aciliyeti, büyüklüğü, tipi ve süresi perioperatif komplikasyon riski için belirleyici faktörlerdir. Kardiyak komplikasyonlar, genellikle asemptomatik iskemik kalp hastalığı (İKH) veya İKH öyküsü olan, kalp yetmezliği, kalp kapak hastalığı, aritmisi olan, uzamış hemodinamik ve kardiyak strese yol açan cerrahi işlem yapılan hastalarda görülür (1).

Kalp dışı cerrahinin komplikasyon oranı %7-11, mortalite oranı ise %0.8 -1.5 olarak bildirilmektedir (2). Kardiyak komplikasyon bunarlık yaklaşık %42'sini oluşturur. (3).

PREOPERATİF DEĞERLENDİRME

Hasta Yönetimi ve Cerrahi Risk Belirlenmesi

Preoperatif değerlendirme multidisipliner yaklaşım ile ele alınmalıdır. Hastanın cerrahisine göre ilgili branşların tümü bu süreçte yer almalıdır (4). Çoğu kez cerrahi işlemlerin öncesinde ve sonrasında önemli bir rol oynayan anestezi uzmanları bu süreci koordine eder.

Cerrahi işlemin tipi ve işlemin neden olduğu hemodinamik stresin derecesi preoperatif kardiyak

riskinin belirlenmesinde en önemli iki faktördür. Yüksek riskli cerrahi girişimlerde 30 günlük kardiyak olay (kardiyak ölüm ve miyokard infarktüsü) riski % 5'in üzerinde iken, düşük riskli cerrahi girişimlerde bu oran % 1'in altındadır (Tablo 1) (1). Stabil kalp hastalığı olanlar için çoğu kez ek değerlendirmeye gerek olmadan orta ve düşük riskli cerrahi girişimler yapılabilir. Potansiyel bir peri-operatif risk taşıyan supheli veya bilinen kalp hastalığı (örn. dogumsal kalp hastalığı, kararsız semptomlar veya düşük fonksiyonel kapasite) olan, düşük ve orta riskli cerrahi öncesi peri-operatif medikal tedavi düzenlenmesinin peri-operatif riski azaltacağı beklenen ya da yüksek riskli cerrahi adayı olup bilinen veya yüksek riskli kardiyak hastalığı olan hastalar anestezi uzmanı tarafından belirlenir ve preoperatif dönemde kardiyoloji uzmanı tarafından değerlendirilmeye tabi tutulur.

Fonksiyonel Kapasitenin Belirlenmesi

Preoperatif kardiyak riskin değerlendirilmesinde en önemli aşamalardan biri fonksiyonel kapasitenin belirlenmesidir. Fonksiyonel kapasite, metabolik eşdeğerlerle (MET) ölçülür. Bir MET, bazal metabolik hıza eşittir. Fonksiyonel kapasitenin uygun bir şekilde değerlendirilmesi efor testi ile mümkündür. Ancak; efor testi yapmadan da fonksiyonel kapasite değerlendirilebilir. Günlük yaşam aktivitelerinin yapılabilirliği fonksiyonel kapasitesinin bir diğer değerlendirme şeklidir. 1 MET istirahatteki metabolik ihtiyaca karşılık gelmektedir, buna göre; iki kat merdiven çıkmak ya

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kısa süreli atımlar yapmak gibi önlemler alınabilir. Pacemaker asenkron ve nonsense modunda olmalıdır, bunu sağlamanın en kolay yolu cerrahi sırasında cilt üzerine magnet yerleştirtirmek ile olur.

Kalp dışı cerrahi esnasında, elektrokoter kaynaklı elektrik akımı İKD fonksiyonunda da bir takım sorunlara sebep olabilir. Cerrahi sırasında İKD kapatılmalı ve cerrahi işleminden sonra devreye sokulmalıdır. İKD'nin defibrilasyon fonksiyonu üzerine magnet yerleştirilerek geçici olarak kapatılabilir. Cihaz kapalı iken, eksternal defibrilatör hazır olmalıdır.

Serebrovasküler Hastalık

Perioperatif inme, perioperatif mortalitede yaklaşık %20 oranında mutlak risk artışına sebep olmaktadır. Yaş, son 6 ay içerisinde miyokart infarktüsü, akut böbrek yetmezliği, inme ve geçici iskemik atak (GİA) öyküsü, hemodiyaliz, hipertansiyon, KOAH ve sigara kullanımı bağımsız öngörücüler olarak saptanırken, artmış vücut kitle indeksi koruyucu tespit edilmiştir (68).

Perioperatif inme genelde iskemik ve kardiyembolik olup, atrial fibrilasyon en sık sebebidir. Antikoagülasyon tedavinin kesilmesi, cerrahi sebepli hiperkoagülasyon tetikleyici faktörlerdir. Aorta veya supraaortik damarların ateroembolisi veya intrakraniyal küçük damar hastalığına bağlı ateroskleroz da perioperatif inme sebebi olabilir.

Son 6 ay içinde GİA veya inme öyküsü olan hastaların nörolojik semptomları sorgulanmalı, nöroloji konsültasyonu istenmeli ve preoperatif karotis arter ve serebral görüntülemesi yapılmalıdır. Her kalp dışı cerrahi aday hastada karotis görüntülemesi gerekli değildir. Vasküler cerrahi öncesinde karotis görüntüleme düşünülebilir, çünkü karotis arter hastalığı bu hasta grubunda sık görülen bir durumdur. Karotis arter hastalığında perioperatif dönemde kontrendikasyon yoksa antiagregan ve statin tedavisi verilmelidir. Karotis revaskülarizasyonu endikasyonu cerrahi dışı durum ile aynıdır.

Periferik Arter Hastalığı

Periferik arter hastalığı (PAH) olan (ayak bileği-kol oranı 0.9 veya daha önce cerrahi veya perkütan revaskülarize edilmiş) hastalarda genellikle tüm vasküler yatağı tutan ileri ateroskleroz vardır. Periferik arter cerrahisi bilinen koroner arter has-

talığı olsun ya da olmasın artmış perioperatif akut miyokard infarktüsü ile ilişkilidir (69). PAH olan hastalarda eğer Lee indeksine göre 2 den fazla risk faktörü varsa İKH açısından preoperatif stres veya görüntüleme testleri yapılmalıdır. Tüm hastalar kontrendikasyon yoksa statin ve antiagregan tedavi almalıdır. Eşlik eden kalp yetersizliği veya İKH yoksa PAH olanlara rutin beta bloker başlanmalıdır (70).

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