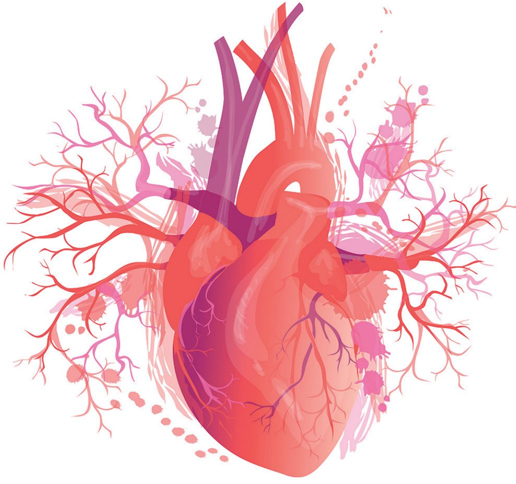

BÖLÜM 12

KARDİYOVASKÜLER CERRAHİ SONRASI GELİŞEN NÖROLOJİK KOMPLİKASYONLAR

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GİRİŞ

Kardiyovasküler cerrahinin postoperatif morbidite ve mortalite nedenlerinin önemli bir kısmını, yaşanabilecek nörolojik komplikasyonlar tutmaktadır. Özellikle son yıllarda cerrahi yapılabilecek hasta yaşının ileriye taşınması ve nörolojik komplikasyonlar açısından daha kırılgan olan yaşlı nüfusun artması göz önüne alınacak olursa; bu durumun önemi her geçen gün daha da artmaktadır. Nörolojik komplikasyonların önlenmesinde temel olarak iki strateji söz konusudur; 1-Preoperatif risk faktörlerinin sağaltımı, 2-Postoperatif gelişen komplikasyonlarla mücadele etme ve destek tedavisidir.

Kardiyovasküler cerrahi ile ilişkili perioperatif nörolojik komplikasyonlar temel olarak iki başlık altında incelenebilir;

1. 1.Santral sinir sistemini ilgilendiren komplikasyonlar:
   a. İskemik ve hemorajik inme
   b. Psikiyatrik ve kognitif bozukluklar
   c. Epileptik nöbetler
2. Santral sinir sistemi dışındaki komplikasyonlar:
   a. Pleksus hasarları; özellikle brakial pleksus
   b. Periferik sinir hasarları

İNME

İskemik İnme

İnme; serebral infarkt, intraserebral hemoraji ve subaraknoid kanamayı içeren, santral sinir sisteminde vasküler bir nedene bağlı akut fokal hasar bırakan nörolojik tablodur (1). Son zamanlarda yapılan bazı çalışmalarda koroner arter baypas cerrahisi (KABC) sonrası görülen inme hızı %1-5 olarak raporlanmıştır (2-6). Bucerius ve arkadaşlarının yaptığı 16.184 hastayı çalışmada; KABC'ye tek ya da ikili kapak cerrahisi eklendiğinde inme riskinin belirgin şekilde arttığı görülmüştür (8). Perioperatif inme iki başlık altında incelenir: Nörolojik hasarın ekstübasyon ve/veya anesteziden uyanma sırasında olduğu erken inme ve daha sık görülen şekliyle nörolojik defisitin extubasyon ve/veya anesteziden uyanma sonrası geliştiği geç inme (2,7,9). Geç inme en sık postoperatif 2-3. günde görülür ve 1.haftadan sonra görülme sıklığı gittikçe azalır (3,7). Erken inme-

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olabilir. Ayakta çekilen göğüs radyografileri yüksek oranda yanlış negatif sonuç verirken spontan ventilasyon yapan hastada ispirasyon sonunda yatar pozisyonda çekilen göğüs radyografleri tanıda daha çok daha çok yardımcıdır (80). Başka bir sağlık sorunu olmayan hastada tek taraflı frenik sinir nöropatisinin prognozu genellikle iyidir. Tek taraflı diyafragmatik tutulum ya hiç bulgu vermez veya aksesuar, abdominal ve interkostal kasların solunuma yardımı nedeniyle çok az bulgu verir. Tek taraflı frenik nöropatide en sık şikayet fiziksel aktivite ile dispne oluşması ve noktürnal ortopnedir (80,82). Çoğu hastada 3-6 ayda iyileşme görülür. Postoperatif frenik nöropatiyi azaltmaya yönelik 1)perikardiyofrenik arterin bağlanmasından kaçınılacak şekilde internal mammarian arterin dikkatli diseksiyonu 2) perikardiyum üzerinde buzlu eriyiklerin uzun süreli birikmesinden kaçınma 3)internal mammarian arter diseksiyonu sırasında plevral boşluğa girişten sakınma (böylece plevral boşlukta buzlu eriyiklerin birikmesinin önlenmesi) 4) kronik akciğer hastalığı olan yüksek riskli hastalarda ılık kardiyopleji veya atan kalpte koroner greftleme yapılması gibi stratejiler yardımcı olabilir (80). Buzlu eriyiklerin kullanımının azaltılıp yerine köpük yalıtım kullanılması gibi farklı cerrahi teknikler de frenik sinir hasarlarını azaltmada etkili olabilir (22,83).

Rekürren Larengeal Sinir Hasarı

Rekürren larengeal sinir hasarı diğer periferik sinir hasarlarına göre daha az sıklıkta görülür. Yetişkin kardiyak baypas cerrahisi sonrasında postoperatif vokal kord disfonksiyonu sıklığı %1,9-7.8 arasındadır (80,84,85). İnternal mamarian arter diseksiyonu sırasında plevraya girilmesi ve çok miktarda buzlu eriyiğin plevral boşluğa kaçması sol rekürren larengeal sinirde hipotermik nöropatiye neden olmaktadır (80,84,86). Solunum yetmezliği, etkin öksürememe ve ekstübasyon sonrası ses kısıklığı olan hastalarda rekürren larengeal sinir hasarından şüphelenilmelidir (80,84). Vokal kord hasarı sıklıkla disfajiye ve bu da aspirasyon pnömonisine yol açabilir (80). Çoğu hasta konservatif tedavi edilirken ciddi vakalarda tekrar entübasyon ve trakeostomiye ihtiyaç duyulabilir (80,84).

İnterkostal Sinir Hasarı

İnterkostal torasik arterin çıkarılması sırasında anterior interkostal sinirlerin hasarı oluşabilir. Bu sinirin hasarı sternum ve göğüs duvarının sol anterolaterali üzerinde karıncalanma, hassasiyet, basit dokunma ile uyarılan ağrı veya sabit yanıcı ağrı şekinde klinik gösterir (22).

Safen Sinir Hasarı

İnternal mammarian arter ve radyal arter gibi diğer greftlerin kullanımının artmasına rağmen, uzun safen ven greftleri halen KABC'de yaygın bir şekilde kullanılmaktadır. Safen venine yakın seyrinden dolayı ven çıkarılması sırasında safen siniri hasarı riski vardır (80).

Sempatik Sinir Sistemi Hasarı (Horner Sendromu)

Servikal sempatik zincir brakial pleksus birinci kostayı geçerken alt trunkusunun medialinde uzanır ve brakial pleksus hasarındaki yollarla zedelenerek pitozis, miyozis ve anhidrozis ile karakterize Horner Sendromu'na neden olabilir.

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