

## Bölüm 17

# KANSER KEMOTERAPİSİ VE KALP YETMEZLİĞİ

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### GİRİŞ

Kalp yetmezliği kardiyak disfonksiyonun sebep olduğu komplike klinik bir sendromdur (ESC KY Klavuzu 1995). Hastalık dispne, yorgunluk ve periferik ödem gibi bulgularla kendini göstermektedir. Konjestif kalp yetmezliğinin nedenleri arasında sıklıkla kardiyovasküler hastalıklar, hipertansiyon ve kalp kapak hastalıkları yer almaktadır (Kannel & ark., 1994). Buna rağmen bazı hastalarda kardiyotoksik ilaçların kullanımı da kalp yetmezliğine sebep olabilmektedir (Teerlink & ark., 1991). Bu ajanlardan en önemlileri arasında sayılabilecek grup kanser hastalarında yaşam süresinin artışında belirgin etkileri ve faydaları olan kemoterapotik ajanlardır. Bu ilaçların kan basıncı değişiklikleri, tromboz, elektrokardiyografi (EKG) değişiklikleri, aritmi, miyokardit, perikardit, miyokard infarktüsü (MI), kardiyomiyopati (KMP) ve kalp yetmezliği gibi kardiyak yan etkileri gözlenmektedir (Shakir & ark., 2009). Bu bölümde kemoterapotik ajanlara bağlı gelişen sol ventrikül (LV) disfonksiyonu ve kalp yetmezliğinin patogenezi, izlem ve tedavisi hakkında tartışmayı amaçladık.

### KEMOTERAPİYLE İLİŞKİLİ KARDİYOTOKSİSİTE

Kanser hastalarının yaşamdan beklenti süresi son iki dekatta belirgin olarak artmıştır. Bu sonuca ulaşmak için etkin antikanser tedavi ile birlikte yan etkilerle de başa çıkmak önem arz etmektedir. Bu yan etkiler arasında hastanın yaşam süresi ve kalitesini en çok etkileyen kardiyotoksisitedir. Birçok kemoterapotik ajanlar kardiyovasküler sistem üzerinde yan etki göstermektedir. Tablo-1 ve Tablo-2’de yaygın kullanılan kemoterapotik ajanların sol ventrikül fonksiyonları üzerine etkisi gösterilmektedir. Kemoterapiye bağlı klinik kalp yetmezliği insidansı %1-5 arasındadır. Asemptomatik sol ventrikül disfonksiyonu %5-20 oranındadır. (Shakir & ark., 2009).

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volol 5 mg günde bir kez uygulanması daha yüksek LVEF ve daha düşük proBNP ile ilişkilendirilmiştir (Kaya & ark., 2013). Non-hodgkin Lenfoma hastalarına CHOP tedavisiyle birlikte valsartan 80 mg veya plasebo verilmiştir. Valsartan ile daha az BNP seviyeleri gözlenmişken, atrial natriüretik peptid ve sol ventrikül diyastol sonu değişiklikleri her iki grupta benzer bulunmuştur (Nakamae & ark., 2005). Cadeddu ve ark. telmisartan'ın epirubisine bağlı oksidatif stres ve kronik inflamasyonu azalttığını ve erken miyokardiyal iyileşmeye olumlu katkısı olduğunu göstermişlerdir (Cadeddu & ark., 2010).

Kalp yetmezliği olan hastalarda kalbin yeniden şekillenmesi önlemek, kardiyak fonksiyonların geri dönmesini sağlamak ve yaşam süresini uzatmak amacıyla  $\beta$ -blokörler, ACE inhibitörleri veya ARB'lerle tedaviye eklenmelidir. (Tablo-4) (de Forni & ark., 1992) (Collins & ark., 1987) (Tallaj & ark., 2005).

**Tablo 4. Kardiyotoksitenin tedavisi (Truong & ark., 2014).**

Kardiyotoksosite	Tedavi	Sonuçlar
<b>Kalp yetmezliği</b>	ACE inh, ARB, $\beta$ -blokörler, MRA, ARNI	Yeniden şekillenmeyi tersine çevirme, yaşam süresini uzatma
<b>Kardiyomiyopati</b>	ACE inh	Kemoterapiye bağlı kardiyomiyopatinin ilerleyişini yavaşlatma ve korunma
<b>Venriküler disfonksiyon</b>	ACE inh (enalapril), $\beta$ -blokörler (karvedilol) ARNI (sacubutril-valsartan)	Sol ventrikül disfonksiyonunun geri dönüşünü kısmen veya tamamen korunması

## SONUÇ

Kardiyotoksosite geliştirme riski yüksek olan kemoterapi hastalarına kardiyomiyopatili hastaların tedavisinin yönetimine benzer yaklaşım gerekmektedir. Bu nedenle, yan etkileri erken tanıyabilmek, uygun zamanda etkin ve güvenli tedavi sağlamak, yaşam kalitesini iyileştirmek ve klinik sonlanımı düzeltmek amacıyla multidisipliner tedavi şekli standart bir yaklaşım olmalıdır.

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