13.
BÖLÜM

KANSER HASTALARINDA İMMUNOTERAPİ VE HEDEFE YÖNELİK TEDAVİLERE BAĞLI MİYOKARD FONKSİYONLARINDA BOZULMA VE KALP YETMEZLİĞİ

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İMMUNOTERAPİ VE HEDEFE YÖNELİK TEDAVİLER

Kanser tedavisinde radyoterapi ve cerrahinin yanı sıra en sık kullanılan terapötiklerden biri kemoterapidir (1). Alkilleyici ajanlar ve antimetabolitler gibi geleneksel kemoterapi ajanları, sadece tümör hücreleri gibi hızlı bölünen hücreleri değil, aynı zamanda sindirim endoteli, kıl folikülü, kemik iliği ve kalp gibi dokulardaki normal hücreleri de etkilemektedir. Spesifik olmayan bu ilaçlar, kardiyotoksisite dahil çok çeşitli yan etkiye neden olmaktadır (2). Genel olarak kanser tedavisinin kardiyovasküler komplikasyonları arasında kalp yetmezliği, koroner arter hastalığı, aritmiler, QT uzaması, valvüler hastalık, arteriyel hipertansiyon, tromboembolik hastalık ve periferik vasküler hastalık yer alır. Avrupa Kalp Cemiyeti'ne göre, kalp yetmezliğine yol açan kardiyotoksisite, sol ventrikül ejeksiyon fraksiyonunda (LVEF) %10'dan fazla düşerek normal değerin altına inmesi (%50) veya global longitudinal strainde başlangıca göre %15'den fazla azalması olarak tanımlanır (3).

Geleneksel tedavinin normal dokulardaki toksisitesinden dolayı daha az yan etkiye sahip olan immunoterapiler ve hedefe yönelik tedaviler geliştirilmiştir. Kanser tedavisinde immunoterapi ve hedefe yönelik tedavi tıpta en hızlı büyüyen alanlardan biridir.

Hedefe yönelik tedavi

İnsan epidermal büyüme faktörü reseptörü 2 (HER2) sinyalinin antikorlarla veya trozin kinaz inhibitörleriyle inhibisyonu yapan ilaçların diğer geleneksel tedavilere ek olarak verilmesi HER2 pozitif meme kanseri hastalarında

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rilmiştir (103). Ayrıca maruz kalınan radyasyon dozunu azaltmak için derin inspirasyonda nefes tutma tekniği ya da solunumsal gating de kullanılabilir. Bu yöntem, alandaki kalp hacmi en aza indirildiğinde ışın verilmesini sağlar ve bir çalışmada solunumsal gating ile görüntüleme alanındaki kalp hacminin yaklaşık %80 azaltılabileceği gösterilmiştir (104). Sol taraflı meme kanseri olan hastaların bazılarında, supin pozisyonda iken derin inspirasyonda nefes tutma tekniği ile tüm kalbin ve sol inen koroner arterin radyasyon dozunun azaltılabildiği saptanmıştır (105). Başka bir çalışmada ise, meme dokusu büyük olan kadınlarda, pron pozisyonun alandaki kalp hacmini %85 azaltarak kalp dozunu azalttığı gösterilmiştir (106).

Sonuç olarak, radyasyona bağlı kardiyotoksisitenin değerlendirilmesi, maruziyet ve kalp hastalığı arasında geçen sürenin uzun olması nedeni ile zordur. En iyi strateji, RT sırasında tedavinin bireyselleştirilerek doz maruziyetinin azaltılması ve kardiyovasküler risk faktörlerinin kontrol altına alınması ile kardiyotoksisiteyi önlemeye çalışmaktır. Kardiyologların tedavi ekibine dahil olarak tedavinin planlanmasında ve hastaların izlemlerinde yardımcı olması önerilir.

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