

KALP DIŐI İLAÇLAR, ZEHİRLER, ELEKTRİK VE RADYASYONUN KALP ÜZERİNE ETKİLERİ

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GİRİŐ

Günümüz tıbbında kullanıma giren modern tedaviler -özellikle kanser yönetiminde- yaşam süresinde uzamaya yol açmıştır. EŐ zamanlı olarak bu tedaviler beraberinde potansiyel yan etkileri de gündeme getirmiştir. Bundan başka kalp dışı bu ilaçlar, radyoterapi gibi yöntemlerin ve çevresel etkilerin (elektrik çarpması, zararlı gazlar, hayvan zehirleri) kalp üzerine zararlı etkileri bu bölümde ele alınmıştır.

KEMOTERAPÖTİK İLAÇLAR

Antrasiklinler

Kemoterapiler içerisinde antrasiklinler en çok kullanılan ve kalbe en çok toksik etkileri olan ilaç gruplarıdır. Bu ilaçlar içerisinde *doksorubisin*, *daunorubisin*, *idarubisin*, *epirubisin* ve antrakinin olan *mitoksantron* sayılabilir. Antrasiklin ve bileşikleri, kalp yetersizliđi gelişim riskini arttırdığından önemli mortalite ve morbidite nedenidir. Antrasiklinler bu zararı reaktif oksijen türlerinin oluşumuyla apoptoz uyurarak, topoizomeraz II ile DNA hasarı yaparak ve protein sentezinin basıkılarak yaparlar (1).

Antrasiklin ilişkili kardiyotoksisite geleneksel olarak erken (genellikle geri-dönüşlü), subakut (tedavi sonrası ilk bir yıl içerisinde gözlenen), geç (tedaviden sonra bir yılı geçtikten sonra gözlenen toksisite) olarak sınıflandırılır. Bu sınıflandırma kalp yetersizliđi oluşumunun saptandığı

retrospektif gözlemsel çalışmalara dayanmaktadır.

Erken antrasiklin toksisitesinde elektrokardi-yografik anormallikler, aritmiler, atriyoventriküler bloklar ve özellikle mitoksantron ile belirgin olan perikardit-miyokardit saptanabilir (2-4). Ayrıca nadiren kalp yetersizliđi bulgu ve semptomları olmaksızın sol ventrikül ejeksiyon fraksiyonu (LV-EF) düşük saptanabilir (5). Erken kardiyotoksisite özellikle 50 yaş üzerinde sık görülmektedir. 1657 hastanın dahil edildiđi bir alma kohort çalışmasında %3,2 akut kardiyotoksisite gelişmiş, akut komplikasyonlar ise atriyal fibrilasyon, akut kalp yetersizliđi, miyokardit ve miyokart enfarktüsü idi (6). Subakut toksisite oranları yaşlı olan ve CHOP(siklofosamid, doksorubisin, vinkristin ve prednizolon) veya CHOP benzeri kemoterapi rejimi alanlarda yüksek (%11 ile 21) saptanmıştır (7, 8). Erken miyokart hasar belirteçleri (troponin yükselmesi, hafif ventriküler disfonksiyon) uzun sürede kalp yetersizliđi gelişeceğini ön gördürür (9).

Geç antrasiklin toksisitesi; nefes darlıđı, yorgunluk, ödem ve ortopne gibi kalp yetersizliđi semptom ve bulgularıyla kendini gösterir. Bundan başka bulgu, semptom olmadan da sol ventrikül ejeksiyon fraksiyonu (LV-EF) de düşme de görülebilir. Geç dönem kardiyotoksisite prevalansı belirleyen faktörler: ileri yaş, kemoterapi önce EF düşüklüđü, antrasiklin dozunun yüksek almak, hematolojik kanser olması, kalp hastalıđı öyküsü

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bir değerlendirme yapılmalı, kalp-damar etkileri bu değerlendirmeye göre yönetilmelidir.

Anahtar Kelimeler: Kardiyotoksik ilaçlar, zehirler, elektrik çarpması, radyasyon

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