

# BÖLÜM 31

## Tedaviye Sekonder İskelet Sistemi Bozuklukları, Tedavisi ve Alınacak Önlemler



Rifat ŞAHİN<sup>1</sup>

### GİRİŞ

Günümüzde ortalama yaşam süresinin artması ve kanser tanısındaki gelişmelerle birlikte daha fazla kanser vakası görülmektedir. Uluslararası Kanser Araştırma Ajansı, Dünya kanser istatistiklerini yayınladı. 2012' te yıllık yeni kanser vaka sayısı 14,1 milyon iken, yıllık kansere bağlı ölüm sayısı 8,2 milyon idi. 2018 yılında 18,1 milyon vaka ve 9,6 milyon ölüm bildirilmişti. 2020' de ise 19,3 milyon yeni vaka ve 10 milyon ölüm bildirildi. Yıllık vaka sayısının 2030 yılına kadar 22,2 milyona ulaşması beklenmektedir (1).

Kanser tedavisinde cerrahi, radyoterapi (RT), kemoterapi, hormonoterapi, immünoterapi gibi seçeneklerin yeri olmasına rağmen 21. yüzyılda kanserin klinik yönetimi hala ciddi sorunlar oluşturmaktır ve kanser önde gelen ölüm sebepleri arasındaki yerini korumaya devam etmektedir. Tarihte iki nobel ödüllü tek kişi olan Marie Curie' nin 111 yıl önce radyumu keşfinden bu yana radyasyonun kanser hücrelerine ve sağlıklı hücrelere olan etkilerini anlamaya yönelik çalışmalar halen devam etmektedir.

Kitabımızın bu bölümünde kanser hastalarının tedavisinde önemli bir yere sahip olan radyoterapinin iskelet sisteme olan olumsuz etkilerinden bahsederken aynı zamanda alınabilecek önlemlerde de değinerek hastaların sağ kalımını artırmayı ve daha kaliteli bir yaşam sürdürmelerini amaçladık. Zira, RT'nin etkinliğindeki herhangi bir gelişme ya da olumsuz etkilerine karşı alınabilecek herhangi bir önlemin çok sayıda hastaya olumlu etkisinin olacağı aşikardır.

### RADYOTERAPİ

Radyoaktif ışınlar ile ilk kez bir hastanın tedavisi, Wilhelm Conrad Röntgen' in X ışığını keşfinden sadece 1 yıl sonra yani 1896' da gerçekleşti (2). İyonize radyasyon, keşfinden bu yana kanser tedavisinde kullanılmaya devam etmektedir. Bu ışınların tümöral hücreleri yok ettiği anlaşılsa da çok zaman geçmeden sağlam hücrelere de zarar verdiği görüldü (3).

Kanser hastalarının yaklaşık 2/3' ü hastalıklarıının belli dönemlerinde RT almaktadır (4). RT, birçok kanser hastası için giderek daha başarılı sonuçlar

<sup>1</sup> Dr. Öğr. Üyesi, Recep Tayyip Erdoğan Üniversitesi, Tıp Fakültesi, Ortopedi ve Travmatoloji AD., rifat.sahin@erdogan.edu.tr



- RT'nin istenmeyen etkilerinden kaçınmak için, her bölgenin minimal etkin dozu her hasta için ayrı ayrı hesaplanarak gereksiz yüksek doz vermekte kaçınılmalıdır.

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