

# BÖLÜM 38

## Pediyatrik Hastaların Radyoterapisinde Radyasyon Maruziyetinin Gelecekteki Sorunları



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### GİRİŞ

Kanser hastalarının tedavisi geçmişten günümüze gelişen yeni kemoterapötik ajanlar, radyoterapi (RT) ve cerrahinin farklı kombinasyonlarıyla elde edilen daha iyi klinik yanıtlarla oldukça değişmiş ve gelişmiştir. Elde edilen sağkalım avantajları hem multimodal yaklaşımlara hem de RT'deki teknolojik gelişmelere bağlıdır. Bu gelişmeler tüm kanser hastalarında patolojik ve anatomik bölgeye göre değişmekle birlikte önemli sağkalım katkıları sağlamıştır. Bu durumda tamamen kür sağlanan hastalarda önem kazanan konu; tedaviye bağlı geç yan etkiler olmuştur. Erişkin kanserlerinde bu etkiler daha kontrol edilebilir düzeyde olmakla birlikte pediyatrik hastalarda daha kritik bir öneme sahiptir.

Yarım yüzyıl öncesine kadar pediyatrik hastalardaki sağkalımlar gelişmiş ülkelerde dahi % 50'den az iken günümüzde kür oranları % 85 civarındadır (1, 2). Her 6 hastadan birinin yaşamını normal olarak sürdürüp tamamlayacağı düşünüldüğünde; bu hastaların erişkinlere göre daha uzun yaşam

süreleri nedeniyle gelecekte daha fazla sorunla baş etmek zorunda kalacakları aşırıdır. Hipokratın önce zarar verme prensibinin, konu çocuk olunca; biz hekimleri ne kadar da çok zorlayacağı ortadadır. Ancak bu durum tedavi planlama ve uygulamada daha titiz ve inceleli bir yaklaşımın da yolunu açmaktadır.

Bu yazının amacı da çocukluk çağı kanserlerine bilimsel veriler ışığında radyasyon onkologu gözüyle bakmak ve 5 yıllık sağkalımı değil, 70-80 yıllık sağlıklı kalımı önceleyecek bakış açısını geliştirmektir.

### PEDİYATRİK HASTALARDA RADYOTERAPİ

Her ne kadar tedavi protokollerinde mümkün olduğunca daha az yer alması tercih edilse de önemli bir grup hastada radyasyon tedavisi olmaksızın kür sağlanamamaktadır. Pediyatrik onkolojik tedavilerde erişkinlerden farklı olarak RT'nin geç yan etkileri oldukça önemlidir. Bu durum radyasyon onkologlarına hem tedavi hem de destekleyici yak-

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- Nörokognitif bozukluk kranial RT'nin en sık geç dönem yan etkilerinden biridir.
- Çocukluk çağı kanserlerinde baş-boyun ve beyin tümörlerinin RT'sinde hipotalamo-pituitar eksenin ışınlanması birtakım nöroendokrin bozukluklara neden olabilir.
- Radyasyona bağlı geç orbital komplikasyonlar sıklıkla görülebilir.
- RT'nin kardiyak disfonksiyona sebep olabileceği, özellikle de 5 Gy üzerindeki RT dozlarının riski belirgin artırdığı gösterilmiştir.
- Çocukluk çağı kanserlerinden kür sağlanan hastalarda ikincil kanser oranı normal popülasyona göre 6 kat fazladır.

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