

Bölüm 43

BEYİN METASTAZLARINDA STEREOTAKTİK RADYOTERAPİ

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GİRİŞ

Beyin metastazları santral sinir sisteminde en sık görülen tümörlerdir. Son yıllarda primer hastalığın ve ekstrakranial metastazların etkin bir şekilde tedavi edilmesiyle uzayan sağkalım sürelerine bağlı olarak beyin metastazı gelişme sıklığı daha artmıştır. Beyin metastazlarının tedavisinde radyoterapi önemli rol almaktadır. Düşük performans durumu nedeniyle cerrahi tedavinin mümkün olmaması, kemoterapi ajanlarının sıklıkla kan beyin bariyerini geçemeyip etki edememesi, immünoterapi ajanları ile yapılmış çalışmaların henüz çok yeni olması sebebiyle beyin metastazı tedavisinde etkinlik açısından en büyük paya sahip olan radyoterapi halen yerini korumaktadır.

Klasik olarak beyin metastazı tedavisinde tüm beyin radyoterapisi (TBRT) uygulanmaktadır. Onkolojik tedavilerde amaç metastatik tümörlerde de öncelikle sağkalım sürelerini uzatabilmek ve/veya palyasyon sağlayıp yaşam kalitesini artırabilmektir. Bu bağlamda stereotaktik radyoterapi (SRT) uygulamaları giderek artan sıklıkta kullanılarak beyin metastazı tedavi yönetiminde yer bulmuştur.

Stereotaktik radyoterapi, hedef dokuya yüksek doz radyasyon verilirken, çevre dokularda hızlı doz düşüşü sağlanarak sağlıklı dokuların radyasyondan en az şekilde etkilendiği radyoterapi yöntemidir. Günümüzde, radyoterapi planlama ve uygulamasındaki teknolojik gelişmeler ışığında SRT'nin uygulanabildiği çok çeşitli teknik ve tedavi cihazı mevcuttur. Tüm teknikler ile görüntü kılavuzluğunda, immobilizasyon gereçleri kullanılarak tedavi güvenle uygulanabilmektedir. Yüksek doz radyasyon tek fraksiyonda verildiğinde stereotaktik radyocerrahi (SRC), 2-5 fraksiyonda verildiğinde fraksiyone steraotaktik radyoterapi (FSRT) tanımı kullanılır. Tedavinin tek günde veya fraksiyone verilip verilmemesi kararı klinisyenin

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