Bölüm
58

KARACİĞER METASTAZLARINDA STEREOTAKTİK RADYOTERAPİ

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GİRİŞ

Yıllar içinde metastatik hastalık tanımı gelişti ve tedavi yaklaşımı değişti. Kanserin metastaz yapma mekanizmasının ilk modern yaklaşımla ifadesi, Halsted tarafından 1907 yılında meme kanserinin yayılımını tanımladığı teorisiyle gerçekleşti. Halsted, hastalığın yaygın evreye gelmesinin, zaman içinde primer kitleden bölgesel lenfatiklere ve sistemik yayılıma düzenli, sistematik işleyen bir süreç olduğunu öne sürdü (1). Weichselbaum ve Hellman ise 1990'lı yıllarda metastatik hastalığı, klinik durumu yansıtan bir spektrum olarak tanımladılar ve dissemine hastalık ile metastazın yeni ortaya çıktığı "oligometastatik hastalık" tanımı ile bizleri tanıştırdılar (2).

Kolorektal kanserler, özellikle karaciğerde (KC) soliter veya oligometastatik hastalık bulgularıyla ortaya çıkan en sık malignitelerden biridir. Karaciğere en sık metastaz yapan kolorektal adenokanserlerdir (3). Klinik seriler ve otopsi raporları da kolorektal kanserli olguların yaklaşık %40-50'sinde hastalığın karaciğerde sınırlı kaldığını, bu nedenle pekçok oligometastatik hastanın karaciğere yönelik lokal tedavilere aday olduğunu vurgulamışlardır (4,5). Karaciğer metastazı olup tedavi edilmeyen kolorektal kanserli hastalarda genel sağkalım oranlarının 1 yılda %31, 2 yılda %8, 3 yılda %3 ve 4 yılda %1, ve medyan sağkalımın 6- 12 ay olduğu gösterilmiştir (6).

Karaciğerde saptanan metastazların oluşum mekanizmasında iki faktör rol oynamaktadır: 1-Primer tümörün lokalizasyonu, 2-Venöz drenajdır. Metaztazların iki tipi bulunmaktadır: Kava tipi ve porta tipi. Porta tipinde; gastrointestinal sistem organlarının venöz drenajı yoluyla tümör hücreleri karaciğere gelmektedir, çoğu izole metastaz şeklinde olup yüksek oranda saptanırlar. Kolorektal, pankreas kanserlerinde izole tutulum sıklıkla görülmesine rağmen multipl metastazlarda saptanabilir. Kava tipinde; tümör hücrelerinin karaciğere ulaşma yolu hepatik arterdir. Direkt primer tümöral lezyondan yada öncelikle akciğere ulaştıktan sonra tümör hücreleri karaciğere gelebilir. Akciğer, meme, kemik, prostat, böbrek kanserleri sıklıkla bu yolla gelmekte, sıklıkla multipl metastazlar şeklinde ve terminal dönemde ortaya çıkmaktadır (7).

Cerrahi rezeksiyon gerek primer gerekse metastatik karaciğer tümörlerinde standart tedavi yaklaşımıdır (8). Karaciğerde sınırlı metastatik lezyonu olan ve iyi seçilmiş hastalarda, metastazektomi belirgin klinik yanıt ve sağkalım avantajı sağlar. Hastaların iyi prognostik özellikler taşıyanları ve izole kolorektal metastatik lezyonu olanlarında cerrahi ile 5 yıllık sağkalım %40-60'a ulaşmaktadır. Fong ve ark.'ları tarafından 1999 yılında kolorektal kanserli oligometastatik olgularda iyi prognostik kriterler tanımlanmıştır: Karaciğer metastazına cerrahi uygulanabilen ve ekstrahepa-

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Abskobal etkide, radyasyon ile indüklenen immun sistem üzerinden T lenfosit artışı sorumlu tutulmaktadır (87). Metastatik malign melanom ve akciğer kanseri olgularında SBRT ile kombine edilen anti-sitotoksik T lenfosit ilişkili protein 4 (CTLA-4) tedavileri, ipilimumab ile radyoterapi uygulanan alandan uzak bölgelerde klinik tam yanıt elde edilmesiyle abskobal etkinin görüldüğü yayınlar mevcuttur (88,89,90). Özellikle kemoterapi ve immunoterapi kombinasyonları ile SBRT uygulamalarının RT sonrası hastalarda görülen alan dışı nüksleri azaltmada fayda sağlayacağı düşünülmektedir. İyi prognostik faktöre sahip hastaların seçiminin ve histopatolojiye spesifik tedavi yaklaşımlarının netleşmesiyle SBRT uygulanan hastalarda sağkalımda artış sağlanması öngörülmektedir (20).

SONUÇ

Teknolojik gelişmelerin kanser tedavisinde yeni ufuklar açması ve uzun dönem sonuçlarda hasta yararına bulguların elde edilmesi, radyoterapinin pekçok tümör tedavisindeki yerini değiştirmiş ve güçlendirmiştir. KC metastatik lezyonlarında özellikle cerrahiye uygun olmayan hastalarda lokal kontrol ve sağkalım avantajına dair verilerin elde edilmesiyle SBRT günümüzde sıklıkla kullanılmaktadır. Tümör biyolojisi, histopatolojik alt tiplere göre tedavi şemaları, SBRT fraksiyonasyon ve tedavi süresi, KT ve/veya immunoterapi kombinasyonları halen cevabı aranan sorular olmakla birlikte, devam eden çalışmalar ışığında bu sorulara cevap bulunacaktır.

Anahtar Kelimeler: Karaciğer Metastazı, Cerrahi, Radyoterapi, Stereotaktik Beden Radyoterapisi, SBRT.

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