Bölüm 27

YENİ TEKNOLOJİLER IŞIĞINDA GİRİŞİMSEL ONKOLOJİK RADYOLOJİ

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GİRİŞ

Son bir kaç dekatta tümör ablasyon yöntemleri kanser hastaları için ümit verici tedaviler olarak ortaya çıkmıştır. Bu tedaviler genellikle cerrahi rezeksiyonun mümkün olmadığı, kemoterapötiklerin etkisiz veya dirençli olduğu bölgelerdeki tümörleri tedavi etmek için kullanılmaktadır.

Girişimsel onkolojik radyolojide lokal bölgesel tedaviler ablatif ve intraarteriyel yönlendirmeli tedavilerden oluşur. Özellikle ablasyon teknolojisindeki gelişmeler ile daha büyük boyutlardaki tümörler daha güvenli bir şekilde ablate edilmektedir. Bu bölümde tedavi amacıyla kullanılan cihazların teknolojik olarak son ürünlerinden ve ürünlerin fizyolojik, mekanik, elektrik teknolojilerinden ve nano teknolojilerden söz edilecektir. Son olarak da bu tedavilerin sık görülen kanserlerdeki endikasyonlarından, uygulama şeklinden ve komplikasyonlarından bahsedilecektir.

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SONUÇ

Girişimsel onkolojik radyoloji girişimsel tedavilerin en hızlı büyüyen ve gelişen bölümünü oluşturmaktadır. Medikal onkologlar, cerrahi ve radyasyon onkologları dahil olmak üzere girişimsel radyologlar da tümör konseylerinde yer almakta kanser hastalarının bakımına en iyi şekilde katkı sunmaktadırlar. Bu konseyler her hasta için kişiselleştirilmiş bakımı tedavi hakkında tartışma fırsatı sunmaktadır. Girişimsel radyoloğun hem işlemin teknik yönlerini bilmesi ve kanser tedavisi hakkında klinik bilgiye sahip olması hem de girişimsel onkolojik radyolojide kullanılan yeni teknolojilerden haberdar olması gerekmektedir.

Tüm teknolojik gelişmelere rağmen ablatif modalitelerdeki sınırlamalar ve dezavantajlar hekimler, mühendisler ve tasarımcıları işbirliği yapmaya zorlamaktadır. Güçlü yazılım programları ile ablasyon yapılacak tümörün gerçek geometride simülasyonunu yapılabilmelidir. Probların kullanımında daha fazla esneklik ve açılandırma sistemlerine ihtiyaç duyulmaktadır. Ablasyon tedavilerinin başarısı, donanım sistemleri, yazılım araçları, matematiksel modelleme ve ısının takibi vs gibi özelliklere dayandığından bu parametreler daha da iyileştirilmeli ve geliştirilmelidir.

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