Bölüm 12

TİROİD KANSERİNDE RADYOAKTİF İYOT TEDAVİSİ VE RADYONÜKLİD GÖRÜNTÜLEME YÖNTEMLERİ

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GİRİŞ

Diferansiye tiroid kanserleri (DTK), tiroid bezinin folliküler hücrelerinden köken alan, genellikle yavaş seyirli ve iyi prognozlu malignitelerdir. Bu tümörler, tiroid hormon sentezine özgü olarak iyodu aktif şekilde konsantre etme yeteneklerini büyük ölçüde korurlar. Bu özellik, radyoaktif iyotun (RAİ) hem tanı hem de tedavi amacıyla kullanılmasına olanak sağlar. RAİ, sodyum-iyot simporteri (NIS) aracılığıyla tümör hücrelerinde birikir; bu sayede hem terapötik etkinlik sağlar hem de metastatik odakların görüntülenmesine katkı sunar. Bu çift işlevli yaklaşım, RAİ'yi DTK'nin yönetiminde teranostik bir ajan olarak vazgeçilmez kılmaktadır.

RAİ tedavisi dışında, I-123 ve I-131 ile yapılan sintigrafik görüntülemeler, hibrit SPECT/BT sistemleri ve PET teknikleri (^{18}F-FDG ve I-124 PET/BT) de DTK'nin değerlendirilmesinde önemli yer tutmaktadır. Bu görüntüleme yöntemleri, hastalığın evrelendirilmesi, risk sınıflamasının yapılması, kişiselleştirilmiş tedavi planlarının oluşturulması ve izlem stratejilerinin belirlenmesinde temel rol oynamaktadır.

Bu bölümde, DTK'de RAİ'nin kullanımına ilişkin biyolojik mekanizmalar, klinik endikasyonlar, doz planlaması, hasta hazırlığı, takip yaklaşımları ve radyonüklid görüntüleme yöntemleri güncel literatür eşliğinde kapsamlı ve bütüncül bir şekilde ele alınacaktır.

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