



BÖLÜM 23

RADYOAKTİF İYOT TEDAVİSİ

Aynur ÖZEN¹

GİRİŞ

İyot, LT4 (tetraiyodotironin, T4) ve L-triiodotironin (T3)'den oluşan tiroid hormonlarının vazgeçilmez bir bileşenidir. İyotun radyoaktif formu olan iyot-131 (¹³¹I)'in oral uygulaması 1940'lardan beri benign ve malign tiroid hastalıklarında yaygın olarak uygulanan güvenli ve göreceli ucuz bir tedavi yöntemi olmuştur. ¹³¹I, 8.1 günlük bir fiziksel yarı ömre sahip hem görüntülemeye izin veren γ -ışını hem de dokuda ortalama 0.4 mm menzile sahip dokuda harabiyet oluşturan β -1-ışını yayan bir radyonükliddir. Radyoaktif iyot tedavisi (RAIT), ¹³¹I'nin sodyum iyodür veya potasyum iyodür formlarında oral veya nadiren de intravenöz yoldan verilmesi anlamına gelir. Uygulamadan kısa bir süre sonra radyoiyot, sodyum iyot simportörü (NIS) aracılığıyla kandan alınır ve tiroid foliküler hücrelerinde birikir.

Genel olarak ¹³¹I ile tiroid hastalıklarının tedavisi için yaygın endikasyonlar, hipertiroidizm ve tiroid volümünü küçültme gibi benign tiroid hastalıkları ile malign tiroid hastalıklarını içerir.

Hamilelik ve emzirme RAIT için kesin kontrendikasyon teşkil etmektedir. Rölatif kontrendikasyonlar ise benign ve malign tiroid hastalıklarında RAIT tedavisi olarak ikiye ayrılan konu başlıkları altında ayrıntılı olarak tartışılacaktır.

Aşağıdaki konu başlıkları içerisinde bazı radyasyon ölçüm birimlerinden bahsedilecektir. Bu birimler Uluslararası Birimler ölçü sisteminde yer almakta-

¹ Uzm. Dr., Sağlık Bilimleri Üniversitesi Bağıcılar Eğitim ve Araştırma Hastanesi, ozenaynur@gmail.com

duğunda, tek foton emisyon bilgisayarlı tomografisi (SPECT) veya varsa BT ile entegre SPECT/BT ile boyun ve diğer anatomik bölgelerin üç boyutlu incelemesi yapılmalıdır.

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