BÖLÜM 4

TİROİD BEZİ HASTALIKLARINDA BİLGİSAYARLI TOMOGRAFİ MANYETİK REZONANS GÖRÜNTÜLEME POSİTRON EMİSYON TOMOGRAFİNİN YERİ

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Tiroid bezi endokrin sisteme ait önemli bir organ olup semptomatik ve asemptomatik tiroid bezi hastalıkları sık olarak karşımıza çıkar. Tiroid bezinin tutulumu diffüz ve fokal olabilir. Tiroid bezi hastalıkları benign ve malign olmak üzere iki grupta incelenir. Tiroid kanseri Amerika Birleşik Devlet'inde en sık görülen endokrin malignitedir. Yılda 400.000 kişiyi etkilediği bilinmektedir (1-3). Özellikle baş-boyun, servikal bölgenin değerlendirildiği Bilgisayarlı Tomografi (BT) ve Manyetik Rezonans Görüntüleme (MRG) incelemelerinde insidental tiroid nodüllerinin saptanması da bu sayının yüksek olmasına katkıda bulunur. Tiroid hastalıklarının özellikle cerrahi öncesi değerlendirilmesinde BT ve MRG kullanımı önemlidir. Tiroid hastalıklarının yayılımı, komşu olan yapıların tutulumu ve uzak hastalığın değerlendirilmesi ultrasonografi , sintigrafi, BT, MRG ve Positron Emisyon Tomografi (PET-BT) ile yapılmaktadır (4-5).

TİROİD ANATOMİSİ

Tiroid bezi trakeanın üzerinde yerleşim gösteren, ortada istmusla birbirine bağlanan 2 lobdan oluşur. Boyutları yaklaşık 20x30x50 mm (transversxön-arkaxkraniokaudal), istmus 3 mm'dir.

Tiroid bezi derin servikal fasyanın orta tabakası tarafından sarılmıştır. Tiroid bezinin üst sınırı tiroid kıkırdağın orta seviyesine doğru, alt sınırı beşinci-altıncı trakeal halkaya doğru yayılmaktadır. Tiroid bezi trakeayı ve rekürren laringeal siniri (RLN) içeren trakeaözofageal oluğu sarmaktadır.

Strap kaslar tiroid bezinin anteriorunda, ana karotid arter, internal juguler venler ise posterolateralde yerleşir. Özofagus trakeaözofageal olukla (TEG) ile tiroidden ayrılır, tiroidin posteriorunda yerleşir. Tiroid hipervasküler bir bezdir, kanlanması eksternal karotid arterden kaynaklanan süperior tiroidal arter, tiroservikal trunkustan kaynaklanan inferior tiroidal arterle sağlanır. İnsanların çok azında aortadan doğrudan orjin alan tiroidal IMA vardır.

Tiroidin lenfatik sistemi internal juguler zincir, paratrakeal, mediastinal, retrofaringeal bölgeleri içerir (6-7) .

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Özellikle kalsitonin seviyesi 1000 pg/mL' den büyük olduğunda PET-BT'de pozitif saptanma oranı yüksektir. Düşük kalsitonin seviyelerinde tümör kitlesinin düşük olması ya da mikroskopik olmasına bağlı olarak PET-BT'de tümör saptanamaz . Genelde PET-BT positif olan medüller tiroid karsinomunda tüm lezyonlarda ortalama (± SD) SUVmax değeri 3.76 ± 1.29 (2-7), arasında düşüktür (51-52).

SONUÇ

Tiroid hastalıkları endokrin cerrahı, endokrin hastalıkları doktoru, radyoloji ve nükleer tıp doktorlarının ekip olarak çalışması ile tanı konan, tedavisi yapılan, takip edilen hastalık grubudur. US tiroid nodüllerini değerlendirmede, biopsi için klavuzluk etmede ideal bir yöntemdir. Bununla birlikte substernal tiroid hastalığı, invaziv tiroid kanserinin preoperatif değerlendirilmesinde, cerrahi planlamada BT ve MRG önemlidir. Metastaz değerlendirilmesinde, rekürrens olan olgularda BT, MRG, PET-BT önemli rol oynar.

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