

# BÖLÜM

# 6

## PARATİROİD HASTALIKLARINDA ULTRASONOGRAFI

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### Giriş

Ultrasonografi (US), paratiroid lezyonlarının preoperatif lokalizasyonunda kullanılan en önemli yöntemdir. Kolay ulaşılabilir, non-invazif, güvenilir, hızlı sonuç veren ve ucuz olan bu yöntemin iyonize radyasyon dahil herhangi bir yan etkisi olmaması da diğer yöntemlerle kıyaslandığında avantaj sağlar. Buna karşın en önemli dezavantajı obez hastalarda görüntü kalitesinin azalması ve inceleme yapan kişiye bağımlı bir yöntem olmasıdır (1). Paratiroid bezlerin US ile değerlendirilmesi hiperparatiroidi (HPT) tanısı için değil, biyokimyasal olarak HPT varlığında lokalizasyon amaçlı kullanılmalıdır. Paratiroid lezyonlarının preoperatif dönemde lokalizasyonu ile cerrahinin başarısının arttığı ve daha az invazif cerrahilerin uygulanabildiği bilinmektedir (2,3). Ek olarak, görüntüleme birden çok paratiroid bezin tutulduğu hiperplazi ve birden çok adenom gibi patolojilerin operasyon öncesi belirlenmesi için gereklidir. Bunların dışında az sayıda da olsa ilk paratiroidektominin başarısız olduğu hastalarda tekrarlayan girişim öncesi görüntüleme yöntemlerinin kullanılması gereklidir. Cerrahi başarısız-

lığın en sık nedenleri birden çok bezin tutulduğu durumlar, ektopik yerleşimli bezler veya paratiroid bezin yetersiz rezeksiyonudur. Paratiroid US sadece görüntüleme amaçlı değil, ince iğne aspirasyon gereken durumlarda ve ablasyon sırasında yol gösterici olarak kullanılır.

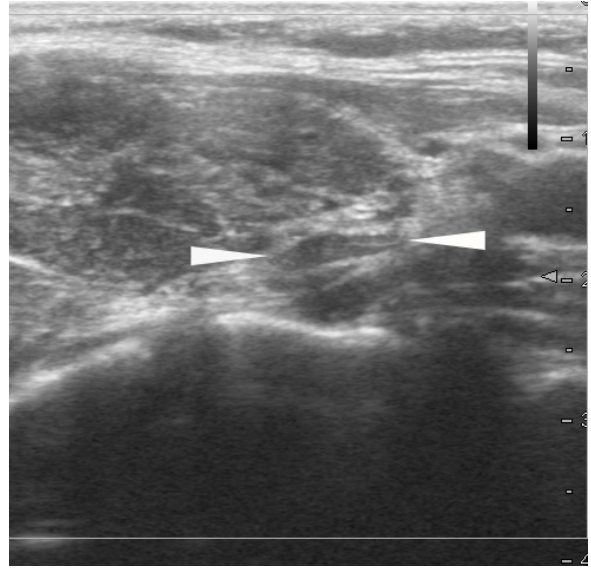
Normal paratiroid bezler oval veya fasülye şeklindedir ve yaklaşık olarak kraniyokaudal çapları 6 mm, transvers çapları 3-4 mm, ağırlıkları 35-50 mg olduğundan US ile görüntülenmeleri zordur (4-6). Genel kabul gören görüş bir lezyonun US ile saptanması için 10 mm'den büyük olması gerektiğidir. Bununla birlikte yüksek çözünürlüklü cihazların ve farklı teknolojilerin kullanımı ile daha küçük lezyonlar da saptanabilmektedir. En sık görülen paratiroid patolojisi olan adenomlar çoğunlukla 10 mm'den büyük olduklarından görüntüleme yöntemleri ile yüksek oranda saptanabilir. Hiperplazik paratiroid bezlerin boyutları adenomlara göre küçüktür ve aynı hastada dahi değişkenlik gösterebilir. Yine de normalin üzerinde olduklarından US ile görülebilirler. Paratiroid karsinomların boyutları adenomlara göre genelde daha büyük beklenir (7).

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## Paratiroid İnsidentaloma

Paratiroid insidentaloma terimi daha önceleri cerrahi sırasında beklenmedik şekilde saptanan paratiroid adenomları için kullanılsa da yüksek çözünürlüklü US cihazlarının kullanımı ile boyun US sırasında tesadüfen saptanan paratiroid patolojileri için de kullanılmaya başlanmıştır. İntraoperatif insidentaloma saptanma oranı %0.2-7.6 arasında bildirilmişken, US ile insidansı %1'in altındadır (6,83). Paratiroid insidentalomalar diğer paratiroid lezyonlara göre genellikle daha genç hastalarda saptandıklarından ve biyokimyasal olarak daha az hiperfonksiyone olduklarından paratiroid hastalıklarının erken bulgusu olduğu düşünülmektedir (5). Tiroid kapsülüne yakın, homojen, hipoeoik, iyi sınırlı ve oval bir lezyon saptandığında büyümüş paratiroid bezi akla gelmelidir. Paratiroid lezyon ile karışan en sık durumlar multinodüler guatr ve özellikle kronik lenfositik tiroiditli hastalarda sıklıkla rastlanabilen peritiroidal lenf nodlarıdır (6) (Resim 59).

Sonuç olarak US, biyokimyasal olarak HPT olan hastalarda paratiroid patolojilerinin değerlendirilmesinde oldukça güvenli ve güvenilir bir yöntemdir. Dikkatli bir inceleme ve uygun ma-



**Resim 59:** Kronik tiroiditli vakada sol superior posterior da hilusu izlenen lenfadenopati

nevralarla sensitivitesi arttırılabilir. İnceleme sırasında hem tipik yerleşim yerleri hem de potansiyel ektopik alanlar değerlendirilmelidir. Gri skala US ile birlikte renkli doppler US ve gerekli durumlarda ESG yapılması lezyonun saptanması ve paratiroid dışı patolojilerden ayırt edilmesi için faydalıdır.

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