

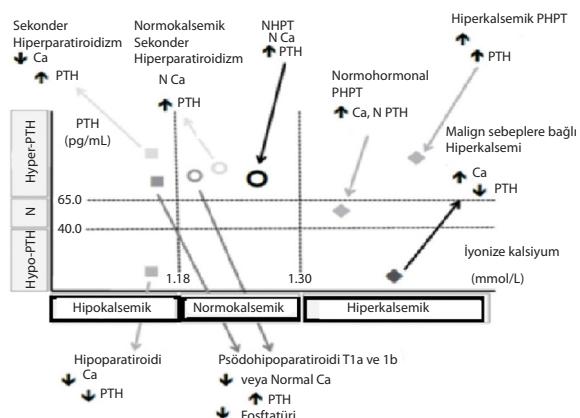
# BÖLÜM 16

## NORMOKALSEMİK PRİMER HİPERPARATİROİDİZM

■ Şefika Burçak POLAT<sup>1</sup>  
■ Ahmet DİRİKOÇ<sup>2</sup>

### Giriş

Parathormon (PTH) kemik metabolizmasının majör regülatör hormonudur. Eskiden sadece hiperkalsemi ayırcı tanısında kullanılan PTH ölçü mü günümüzde osteoporoz ve metabolik kemik hastalıklarının ayırcı tanısında “normokalemik” durumlarda da ölçülümektedir. Primer hiperparatiroidizm (PHPT) bir veya daha fazla paratiroid bezinden otonom PTH salgılanması ile ilişkilidir ve klinik prezantasyon geniş bir spektruma dağılırlar(1). Bu spektrum içerisinde bulunan “normokalemik hiperparatiroidizm” tanımlaması ilk defa 2009 yılında 3. Enternasyonal Asemptomatik Primer Hiperparatiroidizm Çalıştayında yapılmıştır(1). Paratiroid hastalıklarının spektrumu Şekil 1’de özetlenmiştir. Bu zamana kadar Normokalemik Primer Hiperparatiroidi (NPHPT) prevalansı ve olası komplikasyonları ile ilgili birçok çalışma yayınlanmış olsa da takip ve tedavi ile ilgili bir rehber yayınlanmamıştır çünkü verilerinin geldiği kohortlar sıkı tanı kriterlerinin uygulanmadığı retrospektif çalışmalara aittir(2,3).



**Şekil 1.** Paratiroid hastalıklarının spektrumu şekilde özetlenmiştir. Normo, hipo ve hiperkalemik bozukluklar

### Tanım ve Ayırcı Tanı

#### Tanım

2014’de yayınlanan 4. Enternasyonal asemptomatik PHPT Çalıştayına göre NPHPT 3- 6 ay ara ile en az üç kez ölçülmüş persistan normal iyonize veya total kalsiyum (Ca) ile birlikte yüksek PTH

<sup>1</sup> Doç. Dr., Ankara Yıldırım Beyazıt Üniversitesi Tıp Fakültesi, İç Hastalıkları AD., Endokrinoloji ve Metabolizma BD., burcakugurlu@gmail.com

<sup>2</sup> Prof. Dr. Ankara Yıldırım Beyazıt Üniversitesi Tıp Fakültesi, İç Hastalıkları AD., Endokrinoloji ve Metabolizma BD., avector21@yahoo.com

daha sık olması bu sebeplerden biridir(81). Ayrıca NPHPT'de paratiroid adenomları klasik PHPT'li hastalarından daha küçük olduğundan birden fazla görüntüleme tekniğinin kullanımını gereklidir. Adenom saptanamayan ya da birden fazla olan vakalarda cerrahi sonrası persistan hastalık görülme olasılığı yüksektir bu nedenle hedefe yönelik cerrahi ya da minimal invaziv cerrahının başarısı düşük olabilir(81). Bu durumda hastaların büyük bir çoğunluğunda tercih edilecek yöntem bilateral boyun diseksiyonudur. Operasyon sırasında tüm paratiroid bezleri palpe edilir ve görüntülerde gözden kaçabilen anormal boyuttaki bez veya bezler çıkarılır(82). Ancak bilateral boyun eksplorasyonu da yüzde yüz güvenli bir cerrahi yöntem değildir. Operasyon sırasında intraoperatif PTH ölçümleri cerrahının başarısını artıtabilir ancak bu hastalarda PTH düşüşü klasik PHPT'li hastalarda olduğu kadar hızlı olmaz. Bu nedenle NPHPT'li hastalarda intraoperatif

ölçüm yaparken cerrahının süresi gereksiz yere uzayabilir(82) Bu bulgular NPHPT'li hastalarda cerrahının komplikasyonları düzelttiği anlamına gelmemektedir ve bu şekilde algılanmamalıdır.

NPHPT'li hastalarda remisyonu tanımlamak da oldukça güçtür. Post operatif dönemde reküren PTH yüksekliği daha çok azalmış kalsiyum ve D vitamini alımına veya aşikar ya da subklinik aç kemik sendromuna bağlıdır(83). Ancak multigland hastalığın NHPT de hiç de nadir olmadığı göz önünde tutulduğunda post operatif dönemde sebat eden PTH yüksekliğinin ayırıcı tanısını yapmak güç olacaktır. Cerrahının kemik mineral yoğunluğu, nefrolithiasis, kemik kırık riski gibi komplikasyonlar üzerindeki etkinliğinin araştırıldığı çalışma yoktur(83). Hastaya cerrahi endikasyonlarını açık şekilde anlatmak ve hem hasta hem de cerrahın operasyonun en iyi seçenek olduğunu düşündüğü zamanda yapmak önemlidir.

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