



BÖLÜM 27

PARATIROID HASTALIKLARI VE NÖROLOJİK TUTULUM

Canan EROL HAYTAN¹

Paratiroid bezlerinde üretilen ve salgılanan paratiroid hormon, 84 aminoasitli polipeptid yapılıdır. İyonize kalsiyum düzeyinin azalması ile paratiroid hormonun kanda miktarının giderek artmasını, paratiroid hücrelerinin stoplazmasındaki kalsiyum düzeylerinin düşmesi stimüle eder. Plazma kalsiyumunun önemli düzenleyicisidir. Paratiroid hormon sekresyonu plazma kalsiyum düzeyi düşmesi ile uyarılırken, plazma kalsiyum seviyesi artışları ile inhibe olur (1-4).

Paratiroidhormon (PTH) kemik ve böbrekleri üzerinde vücuttaki kalsiyum metabolizmasının düzenlenmesini yönetir. Böbreklerden kalsiyumun geri emilimini sağlarken fosfat atılımını ise artırır. Diğer yandan böbrekteki 25 hidrok-sivitamin D (25[OH]D)'nin aktif metaboliti olan 1,25 dihidroksivitamin D3 (1,25[OH]2D3)'e dönüşümünü uyararak, kalsiyum emiliminin incebağırsaktan artmasına sebep olur. Normal serum PTH değeri 15-65pg/mL'dir (5,6). Serumdaki kalsiyum oranı, vitamin D ve parathormonun böbrek, kemik ve gastrointestinal sisteme etkileriyle fizyolojik değerler içinde tutulur. Erişkinlerde fizyolojik serum total kalsiyum düzeyi 8.8–10.4mg/dL (2.2–2.6mmol) iken iyonize kalsiyum düzeyi 4.5–5.5mmol/L değerleri arasındadır. Erişkin bir insan bedeninde varolan yaklaşık 1000gr kalsiyumun %99'u kemiklerde-dir. Kalsiyum intrasellüler ve ekstrasellüler sinyal aktarımı, sinir uyarılması ve kas kasılması gibi fizyolojik olaylar için gerekli önemli bir elementtir (7-10).

Serum kalsiyumunun düzenlemesi paratiroid bezi tarafından sağlanır, PTH hem kemik yapımını hem de yıkımını artırmaktadır. Kalsiyum vücudumuzda

¹ Uzm. Dr., Marmara Üniversitesi Pendik Eğitim ve Araştırma Hastanesi, Nöroloji Kliniği
Cananerolhaytan@yahoo.com

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