14. BÖLÜM

KETOJENİK DİYETİN EPİLEPSİ DIŞI NÖROLOJİK VE PSİKİYATRİK HASTALIKLARDA KULLANIMI

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Ketojenik diyet (KD) yaklaşık 100 yıldır çocuklarda tedaviye dirençli epilepsilerin tedavisinde kullanılmaktadır.[1] Yağlılık oranı 4:1 olan klasik KD ağırlık olarak %80 yağ, %10-15 protein ve %5-10 karbonhidrattan meydana gelir. Enerji ihtiyacının büyük çoğunluğu uzun zincirli trigliseritlerden karşılanır. Ketojenik diyet, büyüme için yeterli miktarda protein, metabolik ihtiyaçlar için minimum düzeyde karbonhidrat ve çok yüksek oranda lipid içerir. Amaç vücudun ana yakıt kaynağı olarak lipidleri kullanmasını sağlamaktır.[2] Çocuklarda dirençli epilepsi tedavisinde epileptik nöbetler üzerinde etkinliği bilinen KD'nin bilişsel, duygusal ve davranışsal etkileri büyük ölçüde bilinmemektedir. Günümüzde KD epilepsi dışında, psikiyatrik hastalıklar ve pek çok nörolojik hastalığın tedavisinde de kullanılmaya başlanmıştır. Son yıllarda yapılan çalışmalar, duygu durum bozuklukları, depresyon, şizofreni gibi psikiyatrik hastalıkların ve Alzheimer hastalığı, Parkinson hastalığı, Huntington hastalığı, multipl skleroz gibi nörolojik hastalıkların patofizyolojisinde glukoz hipometabolizması, oksidatif stres, nörotransmitter dengesizlikleri ve inflamasyonun da rol oynadığını göstermiştir.[3, 4, 5] Ketojenik diyetin etki mekanizması da benzer yolaklar üzerinden olduğu için bu hastalıkların tedavisinde olumlu etkisinin olabileceği düşünülmektedir.

Ketojenik diyette yağ asitlerinden beta oksidasyon yoluyla, beyin için enerji substratı olarak kullanılacak keton cisimcikleri üretilir. Glikolizin yetersiz bir enerji kaynağı olduğu durumlarda, serum ketonları başta beyin ve kalp olmak üzere vücudun çeşitli dokuları tarafından kullanılır. Ketonlar ayrıca antiinflamatuvar özeliklere de sahiptir. Ketojenik diyet ketozisi uyarır, karbonhidrat ve lipid metabolizmasının yanı sıra mitokondriyal enerji üretimini modüle eder.[6] Beslenme

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