BÖLÜM 6

UYKUNUN NÖROFİZYOLOJİK TEMELLERİ VE DÜZENLENMESİ

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Eğer olduğumuzdan çok daha hasta ve daha deli değilsek,
bunun tek sebebi,
bütün doğal lütüflar arasında en kutsal ve kutsayıcı olan uykudur.
Aldous Huxley

GİRİŞ

Uyku, kişinin duyusal ve/veya diğer uyaranlarla uyandırılabildiği bir süreçtir (1). Aristoteles zamanından 20. yüzyılın başlarına kadar çoğu filozof, uykunun yalnızca azalan duyusal girdi ve düşük beyin aktivitesinin bir sonucu olduğunu düşünmekteydi. Purkinje ve Lhermitte gibi önde gelen erken dönem anatomist ve nörologlar, uyku ve uyanıklığı düzenleyen spesifik sinir yollarının varlığından şüphe duyuyorlardı (2). Uyku, hızlı göz hareketlerinin eşlik ettiği NREM (Non-Rapid Eye Movement) ve hızlı göz hareketlerinin eşlik etmediği REM (Rapid Eye Movement) evrelerinden oluşur. Uyku biyolojisine ilişkin bilgilerimiz son yıllarda önemli ölçüde değişmiş olup, bu evrelerin zamanlamasını seçici olarak düzenleyen beyin yapıları ve rol alan ilgili genler tanımlanmıştır. Bu bölümde, uyku-uyanıklık döngüsünün düzenlenmesi, bu düzenlemede rol alan beyin yapıları ve uykunun fizyolojik sonuçları incelenmektedir.

UYKU VE UYANIKLIK DÖNGÜSÜNÜN DÜZENLENMESİ

Uyku, fizyolojik ve davranışsal düzeyde kompleks süreçler içerir ve bu süreçler temel olarak homeostatik mekanizma ve sirkadiyen ritmin etkisi altındadır (Şekil

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