

BÖLÜM 4

İntiharın Nörobiyolojisi ve Genetiği

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GİRİŞ

İntihar, etiyolojisi heterojen kabul edilen biyolojik, psikolojik ve çevresel faktörlerin etkileşimde bulunduğu karmaşık bir fenomen olarak göze çarpmaktadır (1). İntiharla ilgili davranış riskinin bir kompleks tarafından belirlendiği kabul edilir. “Strese biyolojik yatkınlık modeli” (stres-diyatez modeli) olarak tanımlanan bu kompleks; stresörlerin, nörobiyolojik ve psikolojik yatkınlık zemininde, uyumsuz stres tepkisi olarak intihar davranışını tetiklediğini öne sürmektedir (2). Sosyokültürel faktörler, travmatik yaşam deneyimleri, psikiyatrik geçmiş, kişilik özelliklerini ve genetik yatkınlık bu modelin çerçevesini oluşturmaktadır. Evlat edinme, ikiz ve aile çalışmaları, intihar davranışının, majör psikiyatrik bozuklukların kalıtsallığından bağımsız bir genetik alt yapıya sahip olduğunu kanıtlamıştır (3). 1812 ve 2006 yılları arasında yayınlanan ikiz çalışmalarının gözden geçirilmesinde, diğer psikiyatrik bozuklukların kalıtımından büyük ölçüde bağımsız olarak intihar davranışında genetik bileşenlerin (%30-55 kalıtım derecesi ile) etkisi gösterilmiştir (4). Son dönemde yapılan çalışmalar, intihar davranışının etiyopatogenezinde, kinürenin (kynurenine) yolunu uyaran ve serotonin ve melatonin tükenmesine neden olan nöroinflamasyonun önemini vurgulamaktadır (5,6). Azalmış seroto-

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har davranışları, stres kontrolünde veya bilişsel işlevlerde kötüleşme de dahil olmak üzere bir dizi bozulmaya neden olabilecek HPA ekseninin aşırı aktivitesi ile de ilişkilidir. Arka planda yer alan poligenetik etmenlerin doğrudan etkisinin yanında çevresel maruziyetlerin şekillendirdiği epigenetik mekanizmalar da intihar davranışıyla ilişkili yukarıda açıklanan nörobiyolojik değişiklikleri kontrol etmektedir. Özette, intihar davranışının nörobiyolojisini daha iyi anlaşılması, daha uygun biyobelirteçlerin ve terapötik ajanların geliştirilmesine yardımcı olacaktır. Böylelikle daha etkili tarama yöntemlerine, erken teşhise, etkili yönetime ve intiharın önlenmesine kapı aralayacaktır.

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