

# Obezite ve Kilo Kaybında Antibiyotik Tedavisi ve Bağırsak Mikrobiyomu Üzerine Etkisi

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## 1. Giriş

Gastrointestinal hastalıkların sayısındaki artış, Amerika Birleşik Devletleri’nde ciddi bir sorun haline gelmiştir. Milyonlarca insana Crohn hastlığı, inflamatuar bağırsak sendromu (IBS), ülseratif kolit ve diğer gastrointestinal sorunlar teşhisi konmaktadır (Kappelman ve ark. 2012; Locke III ve ark. 2004). Bu bozuklukların tümü, gastrointestinal sistemde bulunan mikropların dengesizliği ile ilişkilendirilmiştir. Bağırsak disbiyozu diğer olumsuz etkilere neden olabilir ve obezite de dahil olmak üzere çeşitli sağlık sorunlarına neden olabilir. Çocuklarda ve yetişkinlerde obezite son yıllarda önemli ölçüde artmıştır. Aşırı antibiyotik kullanımı ve Batı tarzı diyet, Amerika Birleşik Devletleri’nde obezite artışının temel nedenleri arasında görülmektedir. Sentetik antibiyotiklerin keşfi tipta bir dönüm noktası olarak kabul edilebilir. İnsanlar için ölümcül olduğu düşünülen enfeksiyonlar ve salgınlarla savaşarak yaşam beklentisini büyük ölçüde arttırmıştır. Belirli hastalıkları tedavi etmek veya hastalarda birçok hastalığın kontrolüne yardımcı olmak için farklı kategorilerdeki antibiyotikler kullanılır. Enfeksiyonu tedavi etmedeki etkinlikleri nedeniyle, dünya çapındaki popülasyonlar birçok tıbbi komplikasyon için antibiyotiklere güvenmiştir. Hastalara her yıl artan bir oranda antibiyotik reçete edilmektedir, Hastalık Kontrol ve Önleme Merkezleri (CDC), 2016 yılında yalnızca Amerika Birleşik Devletleri’nde 270,2 milyon antibiyotiğin satıldığını belirtmiştir (CDC 2017; Durkin ve ark. 2018). Bununla birlikte, bu uzun süreli antibiyotik kullanımının antibiyotik direncini ve bağırsak mikrobiyotasının dengesizliğini de içeren bazı sonuçları vardır. Gelişmiş ülkelerdeki çoğu insan, enfeksiyonları tedavi etmek için antibiyotiklere baş vurarak daha fazla bağımlı hale gelmektedir. Bu durum, bazı bakteriyel enfeksiyonlarda başarılı olabilece de, antibiyotiklerin kısa ve uzun vadeli aşırı ve yanlış kullanımı kronik sonuçlara yol açabilir (Pichichero 1999; McGowan Jr 1983). Bu inceleme, antibiyotik tedavisi kavramını ve antibiyotik direncinin yanı sıra bağırsak mikrobiyomu üzerindeki etkisini açıklamayı amaçlamaktadır. Bu bölümde; bağırsak disbiyozu, obezite ve diğer mide-bağırsak hastalıkları tanımlanacak ve aynı zamanda enfeksiyonların sentetik antibiyotikler kullanılmadan tedavi edilmesi için alternatif yöntemler de gösterilecektir.

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