BÖLÜM 3

YOĞUN BAKIM ÜNİTELERİNDE ÇOKLU İLACA DİRENÇLİ GRAM NEGATİF BAKTERİLER, DİRENÇ MEKANİZMALARI VE YENİ TEDAVİ SEÇENEKLERİ

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Gram Negatif Bakterilerde Çoklu İlaca Direncin Ortaya Çıkışı

Gram negatif bakterilerde direnç gelişimi dört mekanizma ile olmaktadır:

- İnaktivasyon
- hedef modifikasyonu
- permeabilite azalması-kaybı
- efluks pompaları

Günümüzde tek tek direnç mekanizmalarından daha fazla, çoklu ilaca direnç gelişiminin mekanizmaları önem taşımaktadır.

Çoklu ilaca direnç gelişimi bakterilerin başlıca iki özelliği ile ilişkilidir (1):

- Diğer mikroorganizmalardan kaynaklanabilecek direnç determinantlarının bakteriye ulaşması ve eksprese olması.
- Edinsel mekanizmalarla eksprese edilen direnç düzeyini artırabilecek intrinsik mekanizmaların devreye sokulabilmesi.

Bakterinin canlılığını sürdürmesi için esas olan periplazmik aralığın kontrolüdür ve bakteri bunu spesifik ve nonspesifik mekanizmalarla gerçekleştirir (1).

Nonspesifik mekanizmalar (Porin ve efluks pompaları): Pek çok çözünür madde bakteri hücresi içine porin adı verilen protein kanalları kullanarak girer (2). Porinler arasında farklılıklar söz konusudur ve bazı porinlerden madde daha hızlı geçer. Porinlerden geçiş hızı dış membran permeabilitesinin belirleyicisidir.

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