BÖLÜM 7

BETA-LAKTAMAZ İNHİBİTÖRLERİNİN VE FUSİDİK ASİTİN ETKİ SPEKTRUMU VE KULLANIM ALANLARI

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Giriş

Beta-laktamaz inhibitörleri beta-laktam antibiyotikleri etkisiz hale getiren beta-laktamaz enzimlerin aktivitesini engelleyerek beta-laktamların fonksiyonunun devamını sağlayan moleküllerdir. Klavulanat, sulbaktam, tazobaktam, avibaktam, vaborbaktam, relebaktam kullanımları uluslararası kuruluşlar tarafından onaylanmış olup aynı zamanda durlobaktam, enmetazobaktam, taniborbaktam, nakubaktam ve zidebaktamın klinik çalışmaları devam etmektedir. Beta-laktamaz inhibitörleri farklı beta-laktamazları değişken etkinlikte inhibe edebilirler. Beta-laktamaz inhibitörlerinin kendine has özelliklerini ve etkinliğindeki farklılıkları bilmenin doğru antibiyotik seçiminde kritik rolü bulunmaktadır. Okuyuculara bu bölümde beta-laktamazlar ve fusidik asitin genel özellikleri, klinik kullanım alanları hakkında bilgiler sunulacaktır.

Beta-laktamaz inhibitörleri

Beta-laktamaz inhibitörlerinin etki mekanizması

Alexander Fleming'in 1928'de penisilini bulması ve 1931'de Howard Florey ve Ernst Chain'in penisilini ilk defa insan üzerinde kullanımıyla beraber antibiyotik çağının başladığı kabul edilmektedir (1,2). Penisilin beta-laktam ailesinin ilk üyesidir. Beta-laktam antibiyotikler penisilin bağlayıcı proteinlere (PBP) bağlanarak bakteri hücre duvarındaki peptidoglikanın çapraz bağlanmasını inhibe eder.

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