

# BÖLÜM 19



## ANJİNAL TEDAVİDE BETA BLOKERLER

Pelin ALADAĞ ÖZER<sup>1</sup>

### GİRİŞ

B-blokerler, 1962 yılında İskoçyalı bilim adamı Sir James Black tarafından adrenerjik uyarının kalp üzerindeki etkilerini incelerken geliştirilmiştir. Propranololün keşfi ile 1988 yılında Nobel ödülünü kazanmıştır. Ardından Brian Prichard antihipertansif özelliğini, Waagstein ve Hjalmorson B-bloker kullanan kardiyomiyopatili hastalarda klinik düzelmeyi göstermişlerdir.

Günümüzde de, B-adrenerjik reseptör antagonistleri kalp hastalıklarının tedavisinde köşe taşlarından biri olmuştur. İskemik hastalıkların tedavisinde baskın özelliğini korurken, ek olarak antihipertansif ve antiaritmiklerdir. Akut koroner sendrom sonrası mortalite ve reinfarktüsü azalttıkları, kalp yetmezliğinde mortaliteyi düşürdükleri, anjinal atak sıklığını ve semptomları gerilettiklerini göstermişlerdir.<sup>1</sup>

### B-Adrenoreseptör Mekanizması

Beta reseptörleri; B<sub>1</sub> ve B<sub>2</sub> olmak üzere iki ana alt tipe ayrılır. B<sub>1</sub> reseptörleri kalpte baskinken, B<sub>2</sub> reseptörleri bronşiyal ve vasküler düz kaslarda bulunur. B<sub>1</sub> adrenerjik agonistler kalpteki ileti sistemi ve ventikülleri uyararak, otomasite, iletim hızı ve kontraktileti artırır. B<sub>2</sub> adrenerjik agonistler reseptörlere bağlandığında, arterlerde ve bronşlarda dilatasyona neden olurlar.

B<sub>1</sub> adrenoreseptörlerin hücre içi sinyal iletimi incelendiğinde, B<sub>1</sub> reseptörlerinin G protein ile eşleştiği ve adenil siklaz sisteminin bir parçası olduğu görülmüştür. B<sub>1</sub> adrenerjik agonistler, B<sub>1</sub> reseptörle etkileştiğinde bağlı olduğu G protein adenilat

<sup>1</sup> Uzm. Dr., Polatlı Devlet Hastanesi, Kardiyoloji Bölümü, aladagpelin@gmail.com

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