



# BÖLÜM 5

## Antiplatelet İlaçların Farmakolojisi

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### GİRİŞ

Antiplatelet ilaçlar platelet aktivasyon ve agregasyon basamaklarını inhibe ederek etki göstermektedir. Bu nedenle antiplatelet ilaçların farmakolojisini anlayabilmemiz için platelet fizyolojisine ve primer hemostaza hakim olmamız gerekmektedir. Plateletler kemik iliğinde megakaryositlerden oluşan, çekirdeksiz, diskoid şekilde, düzgün yüzeyli, 2-4 µm boyutunda hücrelerdir. Dolaşımında 7-10 gün ömürleri bulunmaktadır. Sağlıklı bir erişkinde normal düzeyi 150000-300000/mm<sup>3</sup>tür(1). Platelet tıkaç oluşturmanın yanı sıra immun sistem, endotel hücreleri arası bağlantının oluşturulması, ateroskleroz, metastaz gibi birçok olayda görev almaktadır(2). Endotel hasarının olmadığı normal fizyolojik durumda endotelden salınan prostosiklin ve nitrik oksit (NO) platelet aktivasyonunu baskılaması, platelet yüzeyindeki GP Ib/IX/V, GP Ia/IIa, GP VI reseptörleri inaktif durumda olması aynı zamanda negatif yüklü glikoproteinler sayesinde endotele adhezyon ve agregasyon önlenir(3).

### HEMOSTAZ

Hemostaz; kanın vasküler lümen içerisinde kesintisiz bir şekilde akışını sağlayan kompleks ve

sıkı kontrol edilen bir süreçtir (4). Bu süreç endotel bütünlüğü, prokoagülan, antikoagülan, protrombotik ve antitrombotik güçlerin dengesiyle oluşmaktadır. Bu dengenin herhangi bir güç lehine değişmesi kanama veya tromboz ile sonuçlanmaktadır. Hemostaz aynı zamanda bu dengeyi tekrar sağlamak, kan kaybını en aza indirerek kesintisiz akışı devam ettirmek üzere de işlev göstermektedir. Bu bakımdan hemostaz 3 bileşenden oluşmaktadır; primer hemostaz, sekonder hemostaz ve fibrinolizis(5-7).

### PRİMER HEMOSTAZ

Primer hemostaz aynı anda aktive olan aşağıda bahsedeceğimiz birçok işlem basamağının gerçekleşmesiyle oluşmaktadır. Endotel hasarının oluşması sonrası miyojenik refleks ile vazokonstriksiyon gerçekleşir ardından subendotelial matriksin açığa çıkmasıyla primer hemostaz aktifleşir. Primer hemostaz; platelet adhezyonu, aktivasyonu, şekil değişikliği ve platelet agregasyonundan oluşmaktadır.

### 1. Platelet Adhezyonu

Endotel bütünlüğünün bozulmasıyla subendotelial matrikste bulunan adhezyonu sağlayan von

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