

Bölüm 4

İMMÜN SİSTEM VE KONTROL NOKTALARI

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İMMUN SİSTEM

Bağışıklık sistemi, “kendinden olmayan” proteinleri veya antijenleri tanıyan ve bunlara karşı vücudu savunan çok yönlü biyokimyasal süreçler, çeşitli türlerde çözünebilir biyoaktif moleküller, sitokinler, proteinler ve hücrelerden oluşan kolektif bir yapıdır⁽¹⁾. Antijen organizmaya girdiklerinde immün yanıt oluşturan ve sonucunda ortaya çıkan antikor ve hücre yüzey molekülleri ile birleşme özelliği gösteren, organizmanın yapısına yabancı olan maddelerdir. Antijenin özgüllüğünü belirleyen ve kendisine özgül olan antikorları ile birleşmesini sağlayan kimyasal grup/gruplara, epitop/epitoplar adı verilir. Bir antijen molekülünün birden fazla epitopu bulunur

İmmün sistemin organ ve dokuları;

Başlıca iki grupta toplanır.

1- Santral lenfoid organlar: kemik iliği ve timus, lenfositlerin tüm özelliklerini kazanarak olgunlaştığı organlardır.

2- Periferik lenfoid organlar: dalak, lenf bezi, mukozal lenfoid doku (mucosa associated lymphoid tissue, MALT), edinsel immün yanıtın başladığı organlardır. İmmün hücreler santral organlarda olgunlaşır, periferik organlarda görevlerini yaparlar. İmmün sistemin tüm hücreleri tek bir kök hücreden gelişir. Kemik iliğinde pluripotent hemopoetik kök hücreden daha özelleşmiş iki farklı öncül hücre oluşmaktadır. Bunlar myeloid progenitör hücre ve lenfoid progenitör hücrelerdir. Myeloid progenitor hücreden eritrosit, trombosit, granülosit, monositler ve mast hücreleri gelişmektedir. Lenfoid progenitor hücreden lenfositler (T ve B) gelişmektedir. (Tablo 1)

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