Bölüm
3

TÜMÖR KAÇIŞ MEKANİZMALARI VE MEDİYATÖRLERİ

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GİRİŞ

İmmünoloji ve onkoloji alanları 19. Yüzyılın sonlarına doğru sıkı bir birliktelik içine girmiştir. Özellikle Willian Colley'in bir sarkom hastasında sarkom bölgelerine ölü bakteri enjeksiyonu sonrasında sarkomda küçülme göstergesi, bu birlikteliğin başlangıcı kabul edilmektedir (1). O zamandan bu yana tüm kanser türlerinde immün süryevans (gözetim), immün yeniden düzenleme (editing) ve tümor büyümesi ve gelişmesi arasındaki ilişkiyi araştırmaya yönelik birçok çalışma yapılmış, bu alanda birçok yeni gelişme yaşanmıştır. Kanser hücreleri temel olarak normal hücresel işlemler ile kontrol edilemeyen ve kontrol dışı çoğalan self hücrelerdir. Bu anormal hücreler çevrelerindeki değişikliklere daha iyi adapte olmalarını sağlayan genetik hatalara yatkındır. Darwin'in doğal seçilim teorisinde olduğu gibi, tümör hücreleri üzerindeki immün baskı, immün tanınmaya karşı dirençli tümör varyant hücrelerin seçilimini sağlar.

İmmün tanıma, immün sistemin birbirini tamamlayan iki kolu tarafından sağlanır. Adaptif-hümoral immün sistem transforme hücreleri self, non-self ayrımı yaparak tespit eder. CD8+ T lenfositler sitotoksik T lenfosit (CTL), CD4+ T lenfositler Th1/Th2 alt grupları ile beraber yardımcı T lenfositler olarak adlandırılır. Adaptif immün sistemin sitotoksik T hücreleri tüm çekirdekli hücrelerden eksprese edilen MHC I (Major Histo Compatability class I) molekülü ile eksprese edilen antijenleri tanırlar. Eğer bir tümör hücresi MHC I ile viral ya da anormal protein eksprese ederse antijen spesifik CTL hücrelerce elimine edilir. MHC II ise

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