

BÖLÜM 26

Kansere Yol Açan Virüsler

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GİRİŞ

Viral enfeksiyonlar, dünya genelindeki tüm yeni kanser vakalarının en az %10'un sebebidir(1). Vakaların çoğu (>%85), kötü sağlık koşullarının, HIV/AIDS (human immündeficiency virüs, acquired immunodeficiency syndrome) gibi karsinogenik faktörlerin yüksek oranda görüldüğü, aşılarla ve kanser taramalarına erişimin olmadığı gelişmekte olan ülkelerde görülmektedir. Etkili önlemlerin yaygın olduğu gelişmiş ülkelerde bile, viral enfeksiyonlara atfedilebilen kanserler yeni vakaların en az %4'ünü oluşturmaktadır(2). İnsanlarda kanserojen olduğu bilinen virüsler, çeşitli fiziksel özelliklere sahip altı farklı viral aileden oluşmaktadır (Tablo 1).

Virüsler doğrudan veya dolaylı olarak kansere neden olabilir. Virüsle enfekte olmuş hücrenin kötü huylu hale geldiği doğrudan mekanizmalar, viral onkogen ekspresyonunun etkileri veya viral gen ürünlerinin doğrudan genotoksik etkileri yoluyla gerçekleşir. Doğrudan gerçekleşen viral onkogeneze örneklerinde, kanserli hücre büyüme ve canlılığının devam etmesi için viral onkogen ekspresyonuna bağımlı kalır. Dolaylı onkogenik mekanizmalarda ise, kötü huylu tümöre yol açan hücreler hiçbir zaman virüs tarafından enfekte edilmemiştir. Viral enfeksiyonun, enfekte olmayan hücrelerin doku hasarı ve rejenerasyon döngülerinin hızlanmasına yol açarak kansere sebep olduğu düşünülmektedir (3).

Preinsip olarak, virüsler doğrudan “vur-kaç” mekanizması yoluyla kansere neden olabilir. Bu durumda viral gen ürünleri hücresel canlılığını koruyabilir ve

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ribavirinsiz IFN- α ile antiviral tedavi, HCV ile enfekte indolent lenfomalı hastaların tedavisinde etkili olmuştur, ancak agresif lenfomalı bireylerde nadiren etkili olmuştur(3).

SONUÇ

Onkojenik virüsler, özellikle az sanayileşmiş ülkelerde ve bağışıklık sistemi baskılanmış bireylerde önemli kanser nedenleridir. Anogenital kanserler, lenfomalar, oral ve hepatoselüler karsinomların yaygın nedenleridir. Ortaya çıkan kanıtlar, virüslerin daha yaygın kanserlerin en azından küçük bir yüzdesinden de sorumlu olduğunu göstermektedir. Aşılar ve antiviral ajanlar, virüs kaynaklı kanserlerin önlenmesinde önemli bir rol oynamaya başlamıştır. Viral patogenezi çalışmaları, hücre büyümesinin düzenlenmesi ve kanser etiyojisi anlamamız için kritik öneme sahip paradigmlar oluşturmaya devam edecektir.

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