Bölüm 39

Wilms Tümörü

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Epidemiyoloji ve Risk Faktörleri

Wilms tümörü (WT) çocuklarda en sık görülen abdominal tümör olup çocukluk çağı tümörlerinin %5'ini oluşturur. Genellikle 5 yaş altında tanı alır. Böbreğin medullasından ya da korteksinden köken alabilmektedir. Parankim genellikle salim olarak gözlenir(1). Bilateral WT genellikle 3 yaş altı gibi daha küçük yaşlarda tanı almaktadır ve WT vakalarının %5 kadarını oluşturmaktadır(2).

WT'li çoçukların yaklaşık %5'inde bu hastalığın oluşmasına zemin hazırlayan genetik nedenler saptanmıştır. Bunlardan en başlıcaları WT-1(WT1) geninde yapısal mutasyonlar ve de kromozom 11p15'te saptanan epigenetik hasarlanmalardır. Son bir kaç dekatta bu konuda sürdürülegelen çalışmalar sonucunda WT oluşumundan somatik abnormalitelerin sorumlu olduğu görülmüştür. En önemli 5 lokasyonda saptanan mutasyonlar *WT1*, *CTNNB1*, *WTX*, *TP53*ve de 11p15 kromozomunun *H19/IGF2* lokusunda konuşlanmış epigenetik hasarlanmalardır. Bu mutasyonların birbirleri ile belirgin derecede ilişkileri olduğu saptanmıştır. Ve de 11p15 hasarının, WT oluşumunda %50-75 oran ile en fazla saptanan anomali olduğu gösterilmiştir(3). National Wilms Tumor Study Group (NWTS)-5 çalışmasında kromozom 16'nın uzun kolunda (16q) ve kromozom 1'in kısa kolunda (1p) heterozigosite kaybının (Loss of Heterozygosity-LOH) daha kötü prognoza işaret ettiği 200'den fazla çocuk üzerinde değerlendirilmiş ve evre 1ve 2 'de bu kromozomlardan herhangi birinde LOH varlığının evre 3-4 hastalara kıyasla yüksek hastalık relaps oranı ile direkt ilişkili olduğu gösterilmiştir(4).

Çok fazla sayıda sendrom, konjenital anomali ve kromozom yapısal hasarlanmasının WT oluşması ile ilişkili olduğu saptanmıştır. WT'li hastaların %8'inde kongenital bozukluklar ve de %17'ye varan oranında Sendrom ilişkisi saptanmıştır (5).

WAGR Sendromu, bu sendromlar arasında ilk akla gelenidir. Bu sendrom WT1 geni ile ilişkili, tanımlı ilk sendromdur. WT1 geni 11p13 kromozomunda konumlanır. WAGR sendromu; WT varlığı ile birlikte tam ya da parsiyel aniridi, belirsiz dış genital organlarla ya da kriptoorşidizm ile karakterize genitoüriner malformasyonlar ve kendini genellikle entellektüel yetersizlik olarak

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