

研究简报

环磷酰胺诱发的染色体损伤与P53基因表达的关系

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摘要 目的: 探讨环磷酰胺(cyclophosphamide, CP)对染色体损伤与P53基因表达间的关系。方法: 以正常人外周血淋巴细胞为材料, 用流式细胞仪检测环磷酰胺对突变型P53基因表达的影响, 同时以微核(MN)及姐妹染色单体互换(SCE)为指标, 进行致突变研究。结果: 环磷酰胺用药组突变型P53基因表达率为30.81%, 微核率为8‰, 姐妹染色单体互换率为9.21±1.08, 与对照组比较均有显著差异。结论: 环磷酰胺的致突变作用可能与影响P53的基因的表达有关。

关键词 [环磷酰胺](#); [致突变](#); [突变型P53基因](#); [微核](#); [姐妹染色单体互换](#)

RELATIONSHIP BETWEEN CHROMOSOME DAMAGE INDUCED BY CYCLOPHOSPHAMIDE AND EXPRESSION OF MUTATED P53 GENE

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Abstract Purpose: To study the relation between chromosome damage induced by cyclophosphamide(CP) and the expression of mutated P53 gene. Methods: The expression of mutated P53 gene in human lymphocytes was investigated using flow cytometry. And the micronucleus(MN) and sister chromatid exchange (SCE) tests were studied in vitro. Results: The expression of mutated P53 gene in human lymphocytes treated with CP was 30.81%, (P < 0.01) compared with the control. The frequencies of SCE and MN in human lymphocytes exposed with CP were 9.21±1.08 and 8‰ respectively (P < 0.01), compared with the control. Conclusion: The mutagenic effect of CP may be related to the expression of mutated P53 gene.

Keywords [cyclophosphamide](#) [mutagenicity](#) [mutated P53 gene](#) [micronucleus](#) [sister chromatid exchange](#)

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