人附睾蛋白4和Lewis y抗原在上皮性卵巢癌组织中的表达及其与化疗耐药和预后的关系

《现代肿瘤医学》[ISSN:1672-4992/CN:61-1415/R] 期数: 2019年22期 **页码:** 4048-4052 **栏目:** 论著（妇科肿瘤） **出版日期:** 2019-10-08

Title: **The expression of human epididymis protein 4 and Lewis y antigen in epithelial ovarian cancer and their correlation investigation with chemoresistance and prognosis**

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关键词: 上皮性卵巢癌; HE4; Lewis y; 化疗耐药; 预后

Keywords: epithelial ovarian cancer(EOC); HE4; Lewis y; drug resistance; prognosis

分类号: R737.31

DOI: 10.3969/j.issn.1672-4992.2019.22.026

文献标识码: A

摘要: 目的：探讨人附睾蛋白4（HE4）与Lewis y抗原在上皮性卵巢癌组织中的表达及其与化疗耐药、患者预后的关系。方法:应用免疫组织化学方法检测HE4和Lewis y抗原在92例上皮性卵巢癌组织（36例化疗耐药，56例化疗敏感）中的表达，分析其与临床病理参数、化疗耐药及预后之间的关系。结果:HE4及Lewis y抗原以胞膜着色为主，卵巢癌耐药组中HE4及Lewis y抗原的高表达率明显高于敏感组（75%，83.3% vs 30.4%，30.4%，P＜0.001），且二者的表达呈正线性相关(r=0.240,P=0.021)，其与临床病理参数未见显著性差异，回归分析发现FIGO分期、HE4及Lewis y抗原的高表达是化疗耐药的独立危险因素(HR：10.230，10.496，10.065，所有P＜0.05)，单因素生存分析表明年龄、FIGO分期、残余病灶大小、淋巴转移、化疗是否耐药、Lewis y抗原及HE4的表达都是影响总体生存时间（OS）的重要因素（所有P＜0.05），Cox多因素生存分析显示FIGO分期和Lewis y抗原是影响OS的独立因素（所有P＜0.05）。结论:HE4与Lewis y抗原在卵巢癌组织中的表达呈正相关性，可以预测卵巢癌的化疗耐药，其高表达提示着患者更差的预后。

Abstract: Objective:To investigate the expressions of human epididymis protein 4 (HE4) and Lewis y antigenin patients with epithelial ovarian cancer (EOC) and their correlations with chemotherapy resistance and prognosis.Methods:92 EOC patients who were treated with systemic chemotherapy after cytoreductive surgery were included in this investigation.Patients were divided into two groups,chemotherapy resistant (n=36) and sensitive (n=56).Immunohistochemical (IHC) staining for HE4 and Lewis y antigen were conducted on tissues.IHC results were compared to clinical variables and chemotherapy resistance to determine possible correlation.The relationship between IHC expression and overall survival (OS) was analyzed using Kaplan-Meier method and Cox regression analysis.Results:The expression of HE4 and Lewis y antigen mainly located in cell membrane.The high positive expression of HE4 and Lewis y antigen in resistance group was significantly higher than that of the sensitive group （75%，83.3% vs 30.4%，30.4%，P＜0.001）,and their expression was positively correlated(r=0.240,P=0.021) whereas no obvious significance was observed compared with clinicopathological variants.Binary Logistic analyses showed that advanced FIGO stage as well as high expression of HE4 and Lewis y antigen were independent risk factors for chemotherapy resistance (HR：10.23，10.496，10.065，all P＜0.05).Kaplan-Meier survival analysis showed that age,FIGO stage,residual tumor,lymph node metastasis,chemotherapy resistance,as well as high expression of HE4 and Lewis y antigen were associated with a shorter OS (all P＜0.05).Multivariate Cox survival analysis demonstrated that FIGO stage and Lewis y antigen

were independent predictors of OS(all P < 0.05).Conclusion:The expression of HE4 and Lewis y antigen is positive correlated.HE4 and Lewis y antigen are associated with the development of chemotherapy resistance in EOC.Their high expression is independent factor for OS.

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备注/Memo: National Natural Science Foundation of China(No.81072118,81172491,81101527,81602438）；国家自然科学基金（编号：81072118,81172491,81101527,81602438）；辽宁省博士启动基金（编号：201601133）；高等学校博士科学点专项科研基金(编号:20112104110016，20112104120019)；中国医科大学盛京医院自由研究者计划项目(编号:200807)

更新日期/Last Update: 1900-01-01