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Ag85A和Ag85B DNA疫苗对大鼠膀胱癌免疫治疗的效果 点此下载全文

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摘要：

目的: 探讨Ag85A和Ag85B DNA疫苗对大鼠膀胱癌免疫治疗的效果。方法：致癌剂N 甲基亚硝基脲(methyl nitrosou膀胱癌模型。将建模成功的48只大鼠随机分为生理盐水组、空白质粒组、卡介苗组、Ag85A DNA疫苗组、Ag85B DNA疫苗各8只），建模后第7、14、21天于大鼠右后肢肌内注射相应药物。第28天处死大鼠，流式细胞仪检测各组大鼠脾脏细胞的CD4 +/CD8 + 比值； ELISA法检测大鼠血清中IFN γ分泌水平；剥离膀胱肿瘤进行组织病理学检查。结果：成功建立大疗后，Ag85A组、Ag85B组和Ag85A+Ag85B组膀胱肿瘤体积均有所减小、病理分级也有所减轻，但效果不及卡介苗组。A和卡介苗组CD4 +T细胞亚群数量分别为（17.27±2 95）%、（23.15±1.56）%、（30.80±1.83）%、（38.05为（9.03±1.06）%、（10.28±0 39）、（11 29±0 74）、（13.14±1.24）；CD4 +/CD8 + 比值分别为（2.73±0.19）、（2.97±0 23）；血清IFN γ含量分别为（96.94±12.38）、（131.03±26.68）、（179.20±2生理盐水、空白质粒组相比，Ag85A组、Ag85B组、Ag85A+Ag85B组能够显著提高以上4项检测指标（ P< 0.01），果强于Ag85B组、更强于Ag85A组，差别有统计学意义（ P< 0.05）。 结论： 应用Ag85A和Ag85B DNA疫苗均可提A+Ag85B >Ag85B>Ag85A，但总体上都达不到卡介苗的抗癌免疫效果。

关键词：膀胱癌 DNA疫苗 Ag85A Ag85B 卡介苗

Immunotherapeutic effect of Ag85A DNA vaccine and Ag85B DNA vaccine on bladder tumor in rats

Fund Project:Supported by the Natural Science Foundation of Shanxi Province (NO.20051099)

Abstract:

Abstract Objective: To explore the immunotherapeutic effect of Ag85A DNA vaccine and Ag85B DNA v tumor in rats. Methods: The bladders of female Wistar rats were irrigated with carcinogen methyl nitro of bladder tumor. Totally 48 model rats were evenly randomized into 6 groups: normal saline (NS), pcDN Ag85A DNA vaccine, Ag85B DNA vaccine and Ag85A+ Ag85B DNA vaccine groups. The corresponding dru limbs of rats intramuscularly on day 7, 14, and 21 after model establishment. Animals were sacrificed on removed aseptically. The percentages of CD4 +T cells and CD8 +T cells in splenocytes were measured of CD4 +/CD8 + was calculated. Level of serum IFN γ was assayed by ELISA and pathological exam model of bladder tumor was successfully constructed, with a tumorigenesis rate of 100%. The bladder tu group, Ag85B DNA vaccine group and Ag85A+ Ag85B DNA vaccine group were decreased after treatment grades were also improved, but the outcomes were not better than those of the BCG group. The percen groups were (17.27±2.95)%, (23.15±1 56)%, (30 80±1 83)%, (38.05±1.48)%, respectively; cells were (9.03±1 06)%, (10 28±0 39)%, (11.29±0.74)%, (13 14±1.24)%, respectively; the relat 1.90±0.10, 2.25±0.08, 2.73±0.19, 2 97±0.23, respectively; the production of IFN γ in Ag85A DNA vac group, Ag85A+ Ag85B DNA vaccine group, BCG group were (96.94±12 38), (131.03±26.68) , (179.20± respectively. The above 4 parameters in the Ag85A DNA vaccine group, Ag85B DNA vaccine group and Ag were obviously improved compared with the pcDNA3.1 and NS groups, but were still poorer than those o effects of Ag85A+ Ag85B DNA vaccine group were better than those of the Ag85A and Ag85B DNA vaccin Ag85A DNA vaccine and Ag85B DNA vaccine can improve the immune response of rats with bladder tumo outcome than they are used alone, but even the combination can not reach the effect of BCG.

Keywords:bladder tumor DNA vaccine Ag85A Ag85B bacille Calmette Guérin(BCG)