

## 论文

### 宁夏社区居民代谢综合征NF- $\kappa$ B及TNF- $\alpha$ 水平分析

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#### 摘要:

目的 探讨宁夏社区居民代谢综合征(MS)患者与健康者核因子- $\kappa$ B(NF- $\kappa$ B)、肿瘤坏死因子(TNF- $\alpha$ )表达水平的差异,为宁夏地区人群防治MS提供理论基础。方法 选取MS患者及健康对照组各180例,采用ELISA双抗体夹心法测定其血清NF- $\kappa$ B、TNF- $\alpha$ 表达水平,分析2组差异,MS危险因素分析采用多因素logistic 回归分析。结果 病例组NF- $\kappa$ B表达水平为(1.99±1.42) ng/mL,对照组为(1.85±2.0) ng/mL,病例组高于对照组,差异有统计学意义( $t=-3.15, P<0.05$ );病例组TNF- $\alpha$ 表达水平为(41.04±25.11) g/mL,对照组为(30.5±18.11) g/mL,病例组高于对照组,差异有统计学意义( $P<0.05$ );多因素logistic回归分析显示,吸烟( $OR=1.97, 95\%CI=1.07\sim 3.63$ )、NF- $\kappa$ B( $OR=1.85, 95\%CI=1.03\sim 3.33$ )、TNF- $\alpha$ ( $OR=1.02, 95\%CI=1.01\sim 1.03$ )是MS的危险因素。结论 MS患者血清NF- $\kappa$ B、TNF- $\alpha$ 表达水平升高,吸烟、NF- $\kappa$ B、TNF- $\alpha$ 是MS的危险因素。

关键词: 代谢综合征(MS) 核因子- $\kappa$  B(NF- $\kappa$ B) 肿瘤坏死因子(TNF- $\alpha$ )

### Expression levels of NF- $\kappa$ B and TNF- $\alpha$ in community residents with metabolic syndrome in Ningxia

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#### Abstract:

Objective To investigate expression levels of nuclear factor kappa B(NF- $\kappa$ B)and tumor necrosis factor alpha(TNF- $\alpha$ )in community residents with metabolic syndrome(MS)and healthy controls in Ningxia Hui Autonomous Region and to provide theoretical basis for prevention and control of metabolic syndrome. Methods Totally 180 MS patients and 180 healthy controls were selected for a case-control study.The expression levels of NF- $\kappa$ B and TNF- $\alpha$  were measured with double antibody sandwich enzyme-linked immunosorbent assay(ELISA).Paired  $t$  test was used to analyze the differences in expressions of NF- $\kappa$ B and TNF- $\alpha$  between the two groups and logistic regression was used to analyze relevant risk factors. Results The expression level of NF- $\kappa$ B in the patients was 1.99±1.42 ng/mL and 1.85±2.0 ng/mL in the controls.The NF- $\kappa$ B level in the patients was significantly higher than in the controls( $t=-3.15, P<0.05$ ).The expression level of TNF- $\alpha$  in the patients was 41.04±25.11 g/mL and 30.5±18.11 g/mL in the controls.The TNF- $\alpha$  level in the patients was significantly higher than in the controls( $t=-4.85, P<0.01$ ).Logistic regression analysis suggested that smoking (odds ratio[ $OR$ ]=1.97; 95%confidence interval[95% $CI$ ]=1.07-3.63),NF- $\kappa$ B expression( $OR=1.85; 95\%CI=1.03-3.33$ ),and TNF- $\alpha$  expression ( $OR=1.02; 95\%CI=1.01\sim 1.03$ )could significantly increase the risk of MS. Conclusion The NF- $\kappa$ B and TNF- $\alpha$  are increased in metabolic syndrome patients.Smoking,NF- $\kappa$ B and TNF- $\alpha$  expressions are risk factors for MS.

Keywords: metabolic syndrome(MS) nuclear factor- $\kappa$  B(NF- $\kappa$ B) tumor necrosis factor(TNF- $\alpha$ )

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