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论著

阻塞性睡眠呼吸暂停低通气综合征外周血IGF-2及其mRNA水平变化的初步研究

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摘要 目的： 观察阻塞性睡眠呼吸暂停低通气综合征（OSAHS）患者胰岛素样生长因子-2（IGF-2）水平的变化,并探讨其与OSAHS及其并发的心血管疾病的关系。方法： 选择40例OSAHS患者作为病例组，20例正常人为对照组，病例组再根据血压水平分为正常血压及高血压组，采用酶联免疫吸附试验(ELISA)检测外周血血清中IGF-2水平，用RT-PCR技术检测受试者外周血单个核细胞胰岛素样生长因子-2mRNA（IGF-2 mRNA）水平,并对病例组中15例呼吸暂停低通气指数（AHI）>40次/h的患者进行经鼻持续气道正压通气（nCPAP）治疗1月后,重复以上过程。结果： OSAHS患者血清IGF-2水平及外周血单个核细胞 IGF-2 mRNA水平明显高于对照组(P<0.05)，并与血压升高水平相关。进一步分析与患者AHI呈正相关，与小于90%血氧饱和度时间占总睡眠时间百分比呈正相关,与呼吸暂停时间占总睡眠时间百分比呈正相关，与平均血氧饱和度、最低血氧饱和度呈负相关。经nCPAP治疗后,重度OSAHS患者血清IGF-2水平及外周血单个核细胞IGF-2 mRNA水平明显降低,差异有显著意义。结论： OSAHS患者IGF-2水平明显增高，增高的IGF-2可能参与OSAHS的病理过程，特别是OSAHS引发心血管疾病的相关病理生理过程。

关键词 睡眠呼吸暂停综合征 胰岛素样生长因子Ⅱ

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Change of insulin-like growth factor-2 in obstructive sleep apnea-hypopnea syndrome

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Abstract

<FONT face=Verdana>AIM: To observe the change of insulin-like growth factor -2 (IGF-2) in patients with obstructive sleep apnea-hypopnea syndrome (OSAHS),and to explore the relationship of IGF-2,OSAHS and cardiovascular disease complicated with it.
METHODS: The level of serum IGF-2 in 40 OSAHS patients and 20 healthy controls was measured by enzyme-linked immunosorbent assay (ELISA).The expression of IGF-2 mRNA in peripheral blood mononuclear cells was detected by reverse transcription polymerase chain reaction (RT - PCR).
RESULTS: The serum level of IGF-2 and the expression of IGF-2 mRNA in peripheral blood mononuclear cells were significantly higher in OSAHS group than those in control group (P<0.05) and IGF-2 related with severity of OSAHS.There was a positive correlation between IGF-2 level and apnea hypopnea index(AHI) as well as average angiosthenia.Also,there was a positive correlation between IGF-2 level and percentage of time spend when oxygen saturation was lower than 90% (SLT90%),and so did between IGF-2 level and the ratio of apnea time over total sleep time.There was a negative correlation between IGF-2 and average saturation of blood oxygen as well as lowest saturation of blood oxygen.After nCPAP,the level of IGF-2 in OSAHS patients reduced significantly.
CONCLUSION: The level of IGF-2 in OSAHS increases,and it may play a role in the pathophysiology of OSAHS and the formation of cardiovascular disease complicated with it.</FONT>

Key words Sleep apnea syndromes Insulin-like growth factor Ⅱ

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