

论著

普罗布考对原发性高血压患者血清MDA含量和SOD活性的影响

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摘要:

目的: 探讨普罗布考对高血压患者血清丙二醛(MDA)含量和超氧化物歧化酶(SOD)活性的影响和意义。方法: 筛选40例原发性高血压患者随机分两组, 分别接受以下药物治疗: 苯磺酸左旋氨氯地平 2.5 mg/d + 贝那普利10 mg/d ($n=20$, 对照组)或苯磺酸左旋氨氯地平 2.5 mg/d + 贝那普利10 mg/d + 普罗布考组500 mg/d($n=20$, 试验组), 同时入选健康体检者作为健康组($n=20$), 随访4周。比较3组血压、血脂和肝肾功能。采用黄嘌呤氧化酶法测定血清SOD活性, 采用硫代巴比妥酸法测定MDA含量。结果: 高血压组患者血清MDA水平明显高于健康组, 而SOD活性显著低于健康组; 治疗后试验组及对照组血清MDA水平均下降, SOD活性均升高。试验组MDA下降更明显, SOD升高更明显(均 $P<0.05$)。结论: 普罗布考可以改善高血压患者氧化应激状态, 下调其血清MDA水平并改善SOD活性, 合并降压治疗可能更有助于血压控制。

关键词: 原发性高血压 氧化应激 丙二醛 超氧化物歧化酶 普罗布考

Effect of probucol on serum malondialdehyde and superoxide dismutase in patients with primary hypertension

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Abstract:

Objective: To observe the therapeutic effect of probucol on serum malondialdehyde (MDA) and superoxide dismutase (SOD) in patients with primary hypertension. Methods: A randomized study was performed on 40 patients with hypertension. The patients were randomly assigned to the control (levamlodipine besylate 2.5 mg/d plus benazepril 10 mg/d, $n=20$) or probucol group (levamlodipine besylate 2.5 mg/d plus benazepril 10 mg/d plus probucol 500 mg/d, $n=20$). An additional twenty healthy people were enrolled in the study (normal group). All subjects were followed up for a period of four weeks. Lipids and hepatic/renal function were measured at baseline and after 4 weeks. The levels of serum MDA and SOD activity were assayed by chemical colorimetry, and other indices, including blood pressure, lipids and hepatic/renal function, were measured at baseline and after 4 weeks. Results: Compared to the normal group, the levels of MDA in all of the hypertension patient groups were higher, SOD was lower. The antihypertensive treatment decreased serum MDA levels but increased SOD content, and probucol treatment exaggerated these effects, with greater reduction of serum MDA levels and greater increase of SOD content. Conclusion: The treatment with probucol can improve oxidative stress in hypertension patients, resulting in reduced serum MDA levels and improved SOD activity, thus contributing to a greater antihypertensive effect.

Keywords: primary hypertension oxidative stress malondialdehyde superoxide dismutase probucol

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