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Protective effects of bio-wave regulation factor on cerebral ischemia in rats*

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Abstract Objective: To determine whether bio-wave regulation factor (BRF) can exert protective effects on mitochondria in brain cells after ischemia/reperfusion. Methods: The state 3 and 4 respiration and respiration control ratio (RCR) of the mitochondria in brain cells were determined in a model of ischemia/reperfusion in rats. Results: The respiratory function, especially RCR, was significantly decreased in the rats with only cerebral ischemia and those with ischemia/reperfusion as compared with those of sham operation (SO). However, the respiratory function in animals treated with BRF was not markedly different from that in those of SO. Conclusion: BRF can exert protective effects on mitochondria in brain cells after ischemia/reperfusion, which might provide a new way for treatment of ischemic cerebral injury.

Key words ischemia/reperfusion; respiration control ratio; bio-wave regulation factor; rat

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个案与短篇

烧伤病人血清中首次检出 LDH-IgG复合物1例

A case of LDH-IgG complex detected in serum of postburn patient

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病例: 对烧伤病人的血清标本进行 LDH同工酶测定时,发现异常的电泳带出现, LDH_4升高,并且在 LDH_5的阴极侧出现多余的同工酶带,红细胞 LDH同工酶测定显示出正常的型式,排除了遗传变异的可能性。为了鉴定异常带的性质,使用 IgG IgA IgM抗血清对病人血清进行免疫对流电泳,结果在加了抗 IgG抗血清的泳道中 LDH_4处及 LDH_5处出现沉淀线,证明异常带为 LDH结合免疫球蛋白 G复合物。

讨论

循环血中血清酶和免疫球蛋白结合形成可溶性的复合物,这一现象日本称为酶结合免疫球蛋白,欧美称为特异酶抗体[1],但在我国几乎未见报道。本例为烧伤病人中首次发现,酶结合免疫球蛋白的出现可导致酶活力的改变,影响同工酶的测定值[2]。由于发现的病例较少,其机制和临床意义尚不清楚,估计可能与疾病的进程有关[3]。

关键词 酶结合免疫球蛋白; LDH同工酶; 烧伤
中图法分类号 R392.11

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