Effect of idebenone on serum indexes of patients with post-cerebral ischemic stroke depression

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View from specialist: It is creative, and of certain scientific and educational value.

[ABSTRACT] Objective: To investigate the effects of idebenone on serum indexes of patients with post-cerebral ischemic stroke depression. Methods: A total of 70 patients with post-cerebral ischemic stroke depression admitted to our hospital were enrolled and divided into observation group and control group according to random number table. The observation group received idebenone treatment, control group received placebo treatment. Then serum nerve cytokines, monoamine transmitters and inflammatory cytokines contents were compared. Results: (1) Nerve cytokines; serum BDNF, NGF content of observation group were significant higher than those of control group; (2) monoamine neurotransmitters; serum NE, 5-HT content of observation group were higher than those of control group, 5-HIAA content was lower than that of control group; (3) Inflammatory factors: serum TNF-α, IL-6 and IL-23 content of observation group were lower than those of control group. Conclusion: Idebenone treatment is helpful to increase nerve cytokines content, improve monoamine neurotransmitter metabolism and relieve inflammation reaction; it's an ideal method in treating post-cerebral ischemic stroke depression.

[KEY WORDS] Post stroke depression; Idebenone; Monoamine neurotransmitter; Neural cytokines; Inflammatory factor